

TRANSCRIPT OF PROCEEDINGS BEFORE THE
STATE OFFICE OF ADMINISTRATIVE HEARINGS
(TEXAS COMMISSION ON ENVIRONMENTAL QUALITY)
AUSTIN, TEXAS

APPLICATION OF TEXCOM GULF)
DISPOSAL, LLC, FOR TEXAS) SOAH DOCKET NO.
COMMISSION ON ENVIRONMENTAL) 582-07-2673
QUALITY COMMISSION UNDERGROUND) TCEQ DOCKET NO.
INJECTION CONTROL PERMIT NOS.) 2007-0204-WDW
WDW410, WDW411, WDW412 AND WDW413)

APPLICATION OF TEXCOM GULF)
DISPOSAL, LLC, FOR TEXAS) SOAH DOCKET NO.
COMMISSION ON ENVIRONMENTAL) 582-07-2674
QUALITY COMMISSION INDUSTRIAL) TCEQ DOCKET NO.
SOLID WASTE PERMIT NO. 87758) 2007-0362-IHW

HEARING ON THE MERITS

FRIDAY, DECEMBER 14, 2007

BE IT REMEMBERED THAT at 9:01 a.m., on
Friday, the 13th day of December 2007, the
above-entitled matter came on for hearing at the
Montgomery County Commissioners' Courtroom, 301 North
Thompson, Conroe, Texas before THOMAS WALSTON AND
CATHERINE EGAN, Administrative Law Judges, and the
following proceedings were reported by Evelyn Coder, a
Certified Shorthand Reporter of:

Volume 3

Pages 634 - 849

<p style="text-align: right;">Page 635</p> <p>1 PROCEEDINGS 2 FRIDAY, DECEMBER 14, 2007 3 (9:01 a.m.) 4 (IP Exhibit Nos. 20 through 30 marked) 5 JUDGE WALSTON: We'll go on the record 6 at this time. Today's date is December 14, 2007. 7 This is day three of the hearing on the merits of the 8 application of TexCom Gulf Disposal, LLC, for an 9 underground -- for underground injection control 10 permits and for an industrial solid waste permit. 11 We had a discussion off the record 12 before we began today, and we're going to take some of 13 the witnesses out of order, and if I understand 14 correctly, we're going to call Mr. Wilson at this 15 time. 16 MR. FORSBERG: Your Honor, would you 17 like to call Mr. Wilson, or do we want to get on the 18 other agreements with regards to the other parties? 19 JUDGE WALSTON: Sure. If you want to 20 put those on the record, that'll be fine. 21 MR. FORSBERG: Just to get -- 22 JUDGE WALSTON: Oh, your other exhibits? 23 MR. FORSBERG: Individual protestants. 24 JUDGE WALSTON: That would be fine. 25 MR. FORSBERG: Your Honor, there's been</p>	<p style="text-align: right;">Page 637</p> <p>1 they are -- that they are going to waive 2 cross-examination and allow them into evidence without 3 taking each witness up and swearing them in. I would 4 offer those exhibits. 5 JUDGE WALSTON: Have these been redacted 6 to take into account the rulings on objections? 7 MR. FORSBERG: Yes. The ones provided 8 this morning have been redacted, Your Honor, with 9 regards to the issues in the order -- I believe 10 No. 9 -- by the Court. 11 There is one issue outstanding, however, 12 while we're on that subject. There was a ruling by 13 the Court with regards to issues of property value. 14 They're obvious in the prefiled testimony. I did not 15 redact them. I do not offer those portions 16 specifically as evidence, but as an offer of proof for 17 the record. 18 JUDGE WALSTON: Okay. 19 MR. FORSBERG: So with that caveat, 20 everything else was redacted. 21 MR. RILEY: May I ask a question? 22 JUDGE WALSTON: Yes. 23 MR. RILEY: Mr. Forsberg, how is it 24 represented? Is it just represented as testimony in 25 the exhibits?</p>
<p style="text-align: right;">Page 636</p> <p>1 a discussion this morning and agreement, I believe, 2 with counsel for TexCom with regards to several of the 3 individual protestants' prefiled testimony. 4 Originally their testimony was not marked as an 5 exhibit. I have provided marked copies this morning 6 as exhibits. 7 Specifically, the prefiled direct 8 testimony of Shirley Hoagland is IP -- Exhibit IP 20. 9 The prefiled direct testimony of Edgar Hoagland is IP 10 21. The prefiled direct testimony of Nicky Earl Dyer 11 is IP Exhibit 22. The prefiled direct testimony of 12 Roy Harris is IP Exhibit 23. The prefiled direct 13 testimony of Flora Mae Harrell is IP Exhibit 24. The 14 prefiled direct testimony of Patty Mouton is IP 15 Exhibit 25. The prefiled direct testimony of Lois 16 Nelson is IP 26. The prefiled direct testimony of 17 Melvin Remley is IP 27. IP prefiled testimony, 18 No. 29, is Edwin Stephan -- or Stephan. Excuse me. 19 And IP Exhibit 30 is the prefiled direct testimony of 20 Richard Ward. 21 Based upon my representation that I've 22 discussed these prefiled testimonies with these 23 witnesses and that they would testify live today as 24 they did in this prefiled testimony, it's my 25 understanding that counsel for TexCom has agreed that</p>	<p style="text-align: right;">Page 638</p> <p>1 MR. FORSBERG: Yes. 2 MR. RILEY: Not underlined or otherwise 3 noted? 4 MR. FORSBERG: No, it is not, but it's 5 clear. I mean, there's two questions, I believe, in 6 each, which is, do you feel it will harm your property 7 value. And, I mean, to the extent if there is any 8 confusion, I would be glad to provide a list of page 9 and line numbers before the end of the hearing. 10 MR. RILEY: That would be helpful, just 11 so the record is clear as to which portion is the 12 offer of proof versus which portion is in the record. 13 MR. FORSBERG: Yeah, I'll certainly get 14 it to you. 15 JUDGE WALSTON: Do I assume all the 16 other parties also waive cross-examination of these 17 witnesses -- 18 MR. WILLIAMS: Yes. 19 JUDGE WALSTON: -- and stipulate to the 20 admissibility of these exhibits. 21 With those understandings and 22 agreements, Individual Protestant Exhibits 20 through 23 27 and 29 and 30 are admitted. 24 (IP Exhibit Nos. 20 through 27, 29 and 25 30 admitted)</p>

<p style="text-align: right;">Page 639</p> <p>1 MR. FORSBERG: I'm sorry, Your Honor. 2 Also exhibits -- Individual Protestants Exhibits 17, 3 18 and 19 are within the testimony of Mr. Ward, which 4 has been admitted as Exhibit 30. I would offer those 5 as well. 6 JUDGE WALSTON: What were the numbers 7 again, 17 -- 8 MR. FORSBERG: 17, 18 and 19. 9 JUDGE WALSTON: Exhibits 17, 18 and 19 10 are also admitted. And I'm assuming 28 is Mr. Wilson. 11 MR. FORSBERG: Yes. 12 (IP Exhibit Nos. 17 through 19 marked 13 and admitted) 14 MR. FORSBERG: With that, Your Honor, 15 individual protestants would call Mr. Edmund Wilson to 16 the stand. 17 JUDGE WALSTON: Mr. Wilson, if you'll 18 make your way to the witness stand. 19 (Witness sworn) 20 JUDGE WALSTON: Be seated. Can you make 21 sure that microphone is turned on? It is. 22 And state your full name for the record. 23 A Edwin Ardis Wilson. 24 JUDGE WALSTON: Mr. Forsberg, you may 25 proceed.</p>	<p style="text-align: right;">Page 641</p> <p>1 A That's correct. 2 Q Specifically Exhibits 1 through 16. Correct? 3 A That is correct. 4 Q Are there -- I'm sorry. I may have already 5 asked this. Did you review your prefiled testimony? 6 A Yes. 7 Q Do you have any corrections you would like to 8 make to that prefiled testimony? 9 A Yes, Mr. Forsberg, I do. On Page 7, Line 6, 10 at the end of Line 6, you'll see the words "state 11 law." I should have referenced TCEQ-0623 UIC Class I 12 instead of state law. 13 JUDGE WALSTON: Could you say that 14 again, just the citation? 15 A TCEQ-0623 UIC Class I. 16 JUDGE WALSTON: Okay. Thank you. 17 Q (By Mr. Forsberg) Other than that 18 correction, are there any other corrections to your 19 prefiled you would like to make? 20 A No, sir. 21 Q And is your prefiled testimony the same as it 22 would be if you were asked these questions live today? 23 A Yes. 24 MR. FORSBERG: With that, Your Honor, I 25 would ask to admit IP Exhibit No. 28, the prefiled</p>
<p style="text-align: right;">Page 640</p> <p>1 PRESENTATION ON BEHALF OF THE 2 INDIVIDUAL PROTESTANTS 3 EDWIN WILSON, 4 having been first duly sworn, testified as follows: 5 DIRECT EXAMINATION 6 BY MR. FORSBERG: 7 Q Good morning, Mr. Wilson. 8 A Morning. 9 Q Can you identify your position in this 10 matter? 11 A I'm recognized by the Court as an individual 12 protestant, an affected person. 13 Q Okay. Do you hold any other position or has 14 any other position become part of your work in this 15 case? 16 A I'm also recognized as an expert witness. 17 Q And as part of serving as an individual 18 protestant and being an expert witness in this case, 19 have you prepared prefiled testimony? 20 A Yes, I have. 21 Q And have you had an opportunity to review 22 that prefiled testimony? 23 A Yes. 24 Q And attached to that prefiled testimony, was 25 there a number of exhibits?</p>	<p style="text-align: right;">Page 642</p> <p>1 testimony of Edmund Wilson, which, again, has been 2 redacted per the Court's order, the copy that was 3 provided this morning, and Exhibits 1 through 16 filed 4 by the individual protestants. 5 JUDGE WALSTON: Okay. Subject to the 6 Court's previous ruling on objections to these 7 exhibits, Individual Protestants Exhibits 1 through 16 8 and 28 are admitted. 9 (IP Exhibit Nos. 1 through 16 marked and 10 admitted and IP Exhibit No. 28 admitted) 11 MR. FORSBERG: I will pass the witness, 12 Your Honor. 13 JUDGE WALSTON: Okay. Lone Star? 14 MR. GERSHON: We pass the witness. We 15 have no questions. 16 JUDGE WALSTON: Montgomery County? 17 MR. WALKER: Aligned protestants have no 18 questions of this witness, Your Honor. 19 JUDGE WALSTON: Public Interest Counsel? 20 MS. COLLINS: No questions. Thank you. 21 JUDGE WALSTON: Applicant? 22 MR. LEE: We do have some questions. 23 CROSS-EXAMINATION 24 BY MR. LEE: 25 Q Good morning, Mr. Wilson.</p>

1 A Good morning, Mr. Lee.
 2 Q I'm going to start this morning by asking
 3 some questions about your background if that's okay.
 4 A Sure.
 5 Q First off, where do you live in relation to
 6 the proposed TexCom facility?
 7 A I live two and a half miles from the
 8 facility. My address is 10200 South Summerlin. I
 9 live in Southwind Ridge subdivision. That is in the
 10 Conroe city limit.
 11 Q Okay. Your resume indicates that you have, I
 12 think, it's 34 years of experience in designing,
 13 managing the design of pipelines. Is that correct?
 14 A Yes.
 15 Q And for most of your career, you were in a
 16 managerial position. Is that correct?
 17 A That's correct.
 18 Q So within that managerial position, did you
 19 have responsibility over preparing expense and capital
 20 addition budgets for pipeline projects?
 21 A Yes.
 22 Q Did you have responsibility at times to
 23 supervise the company's surveyor who did the surveying
 24 route for the new pipeline?
 25 A Yes.

1 Q And was it your responsibility at times to
 2 write up center line descriptions or metes and bounds
 3 descriptions to provide to the legal department and
 4 right-of-way department to procure the necessary right
 5 of way for pipeline projects?
 6 A I've done quite a bit of that.
 7 Q Okay. Did you also work on route selection?
 8 In other words, the pipeline needs to go from Point A
 9 to Point B. Were you involved in managing the
 10 selection of the route for a pipeline?
 11 A That is correct.
 12 Q Did you also work with the purchasing
 13 department of the company that you worked with in
 14 order to procure the materials that would be necessary
 15 to build the pipelines?
 16 A Extensively.
 17 Q Was it your responsibility to make sure the
 18 pipeline project would come in on budget?
 19 A Very much so.
 20 Q Were you also involved in condemnation
 21 hearings that were held in connection with any given
 22 pipeline project?
 23 A I recall attending one condemnation hearing.
 24 Q Okay. Mr. Wilson, if you could, describe
 25 what kind of pipelines did you design or manage the

1 design and building of?
 2 A They ranged all the way from crude oil
 3 through refined products, natural gas pipelines, LPG,
 4 which is liquified petroleum gas, propane, butanes and
 5 heavy oils as well, like No. 6 bunker fuel. That
 6 would kind of cover, I guess, most of the types of
 7 pipeline.
 8 Q So those were all, would you agree, flammable
 9 hydrocarbon products?
 10 A Yes.
 11 Q No -- obviously no pipeline wastewater?
 12 A No.
 13 Q And if you could, describe how deep were the
 14 pipelines that you worked on?
 15 A Normal cover over cross-country pipeline
 16 would be three feet. It varies, depending upon the
 17 location. For instance, at a road crossing, the depth
 18 is greater. At river crossings, especially with
 19 directional drilling techniques, it could be 20 feet
 20 or more deeper. So it depends upon the location and
 21 actually all -- within satisfying the laws.
 22 Q Okay.
 23 A Railroad crossings would be another instance
 24 where additional depth of cover would be required.
 25 Q But, again, really no deeper than, say,

1 20 feet or so. If you encountered some obstacle while
 2 you were building a pipeline, you might have to go
 3 deeper than three feet?
 4 A I actually had to do some deeper than
 5 20 feet.
 6 Q How deep? What was the deepest you had to
 7 go?
 8 A I would say probably about 25 to 28 feet.
 9 Q That was because, as you're designing the
 10 pipeline, you encounter some obstacle, something on
 11 the surface that would require you to dig deeper
 12 underground in order to have a secure pipeline under
 13 that obstacle?
 14 A That could be one reason.
 15 Q Okay. While we're on the topic, if you
 16 could, describe what are the different engineering
 17 considerations that go into building a pipeline?
 18 A Basically you've already covered some of the
 19 things; route selection, of course, dealing with
 20 landowners and so forth, which really wouldn't be an
 21 engineering aspect of it. Specifically with pipeline,
 22 doing modeling for the pipeline to determine exactly
 23 what size line one needs for moving the projected flow
 24 rate. So there's sizing involved.
 25 There's -- of course, there's economic

1 considerations in sizing the pipeline to the most
2 appropriate size. There's stress analysis involved
3 with the pipeline designs and manifolds and so forth,
4 station equipment, placement -- actual placement of
5 pipeline pump stations at the most appropriate point,
6 booster stations. Of course, there's corrosion
7 control aspects in design. I probably just touched
8 the surface on it.

9 Q Okay. You mentioned modeling. Now, when you
10 say "modeling," are you referring to -- basically
11 you've got a product, whether it be oil or gas or some
12 hydrocarbon that you need to move from Point A to
13 Point B, and on the site of the pipeline, of course,
14 and you know how much you're going to potentially move
15 and you know how far you have to move it.

16 So then the question becomes what sort
17 of pressures do we need to apply at different points
18 along the pipeline in order to keep that stuff moving
19 through the pipeline. Would that be a correct
20 statement?

21 A Certainly. One must also take into
22 consideration changes in elevation as well.

23 Q Right. So in other words, if you're going
24 from the Gulf Coast up to Colorado or something,
25 you've got a change in elevation. So that would --

1 gravity plays in that, and you have to account for
2 that in deciding how big your pumps have to be as you
3 move along the pipeline?

4 A Correct.

5 Q Any does the concept of hydraulics come into
6 play at all?

7 A Sure.

8 Q Please describe that.

9 A Well, the way I would explain the hydraulic
10 application is in designing a pipeline system, one
11 would define the system from Point A to Point B
12 considering changes in elevations and actually prepare
13 what we call a system curve, which would be a plot of
14 pressure versus flow rate where one could look at the
15 required pressure at any particular flow rate.

16 So system curves are developed for
17 pipeline segments between pump locations or pump
18 station locations, and from that, pumps are then
19 sized. For instance, in most pipeline systems today,
20 moving hydrocarbon products, petroleum products,
21 centrifugal pumps are used. So I don't know how much
22 detail you want me to go into. I could talk to you
23 for hours on it but --

24 Q I bet you could, but I think you've answered
25 my question at this point.

1 You mentioned in your answer that
2 certain pressures are involved. What do you mean when
3 you say "pressures"?

4 A Okay. To move a product, whatever kind of
5 fluid product, a fluid medium, through a pipeline
6 requires energy, and that energy is in the form of
7 pressure. So the way one obtains that pressure is
8 through the installation of pumps.

9 In our industry, positive displacement
10 pumps could be used such as TexCom proposes for their
11 injection pumps. More often than not, in the movement
12 of petroleum products through pipeline systems,
13 centrifugal pumps are used. So one has to determine
14 how much pressure is needed at a particular location
15 to overcome the resistive forces, the friction loss in
16 the pipeline and elevation changes.

17 You may have, actually, an elevation
18 advantage if you're going downhill but a disadvantage
19 if you're going uphill. So taking into consideration
20 all the design requirements, the pressure
21 requirements, one can then select a centrifugal pump
22 and size it. Here, again, I won't go into all the
23 details, but size it to meet the pressure requirement
24 that has been evaluated and --

25 Q So basically -- I'm sorry. Was there

1 something else you wanted to say?

2 A Well, I was going to say, talking about
3 pumps, of course, there's a driver, electric motor or
4 engine driven, could also be a turbine engine -- jet
5 engine driving a pump or a compressor if it was a
6 natural gas system.

7 So the pump size is determined, and then
8 from the amount of -- from the flow rate, pressure
9 requirements and the efficiency of the pump, one then
10 sizes the -- what I call the driver, the pump -- I'm
11 sorry -- the electric motor or engine that will be
12 actually driving or turning that pump.

13 Q It sounds like it's fairly complicated.

14 There's a lot of different ways to engineer a pump
15 system to move product. You mentioned several
16 different kinds of pumps, but basically the idea, of
17 course, is to move product through a pipeline from
18 Point A to Point B. Is that correct?

19 A That's correct.

20 Q So you're not -- when you say "pressures,"
21 you're not referring to pressures exerted from the
22 outside of a pipe inward. You're talking about
23 basically pressures exerted within the pipe to make
24 sure that the pipe is strong enough, made of the right
25 materials so that it won't burst?

1 A Well, that's the main thing, but also
2 involved, and as I mentioned earlier, I didn't get
3 into all the aspects of design, but one has to
4 consider external pressures on the pipeline as well.

5 Q Could you describe those, please?

6 A Sure. For instance, at a road crossing or a
7 railroad crossing, there are external loads that have
8 an impact upon the pipeline. So those loads actually
9 impact the piping. So one must ensure that the
10 pipeline is designed adequately, not only to handle
11 the internal pressure but as well as the external
12 loads that are on the pipeline. That may involve
13 going with a heavier wall pipe of piping with a higher
14 yield strength.

15 Q Okay. So in other words, not much pressure
16 exerted by three feet of topsoil, but if you go under
17 a train, for example, the train cars can be very heavy
18 so basically you need to take into account the weight
19 that's going to be exerted on the top of a pipeline.
20 Is that what we're talking about?

21 A Yes.

22 Q Did any of your pipeline projects -- I mean,
23 this might sound like a silly question, but they
24 didn't involve the injection of any liquids. I mean,
25 have you ever worked on any project that involved the

1 injection of liquids into the subsurface stratum?

2 A No, I haven't.

3 Q And would it be correct to say you're relying
4 primarily on your experience gained as a pipeline
5 project manager for your qualifications to testify in
6 this hearing?

7 A Not exactly. It's really based on my
8 experience as an engineer, my education and the many
9 years of experience that I've had in actually dealing
10 with pipelines --

11 Q Okay.

12 A -- hydraulics involved and so forth, and I
13 might add that an injection well is actually nothing
14 more than a vertical pipeline, if you will.

15 Q Okay. So really no other -- I mean, no other
16 sources of education, training or experience besides
17 what you've gained while designing and managing the
18 design and building of pipelines?

19 A That's basically correct.

20 Q Okay. Do you hold any professional licenses?

21 A No, I do not.

22 Q When did you first become familiar with the
23 instructions for completing a UIC well application?

24 A That was in early February. Mr. Nick Dyer,
25 also an affected person, came to our subdivision and

1 informed one of our board members that this was
2 proposed, the injection wells were proposed. And this
3 board member, Mary Glenn, knew of my technical
4 background.

5 She asked if I would take a look at it.

6 So I did and did a little research starting at -- to
7 see what was around the location and found from the
8 Railroad Commission website, which I was familiar
9 with, that this was in the Conroe oil field with many
10 abandoned wells.

11 So that alarmed me, and I continued to
12 do some research, and you probably know the rest of
13 the story; here we are today.

14 Q Right. I will say that went a little far
15 beyond -- my question was really just when did you
16 become familiar with the rules?

17 A Around February 1st of this year.

18 Q Okay. And prior to that day, did you have
19 any familiarity at all with UIC facilities?

20 A I knew that they existed, but I've never
21 actually dealt with them.

22 Q Okay. In your career -- I might have asked
23 this before, but I'm going to ask it slightly
24 differently. Did you ever deal with the concept
25 called "reservoir mechanics"?

1 A I'm familiar with, of course, the term. The
2 answer would really be no.

3 Q Okay. Mr. Wilson, what is your understanding
4 of the term "cone of influence"?

5 A The cone of influence, as I -- I think I've
6 actually been partly educated in the last two days --
7 is the area within the formation where the increase in
8 formation pressure due to injection would have an
9 impact on an abandoned well.

10 If the pressure in the formation has
11 increased to a certain point that -- where it could
12 actually overcome the resistive forces of a mud plug
13 and gel strength in an abandoned well, then that would
14 be within the cone of influence.

15 Q And do you recall -- you were deposed a
16 couple of weeks ago, and I believe you had a different
17 understanding of the concept "cone of influence."

18 A Yes. When I worked on my testimony, I
19 actually prepared some exhibits, and I was showing a
20 cone of -- or a pressure influence zone, and,
21 obviously, to move product in a formation takes
22 pressure, and even though it does take pressure to
23 move the product, the waste material out to the extent
24 of the perimeter of the plume, I understand now
25 that -- so I was considering that as a zone of

1 pressure influence because it, indeed, takes pressure
 2 to move a fluid out to the extent of wherever it is.
 3 But I understand that specifically the
 4 cone of influence, as relates to UIC wells, is what I
 5 just explained, that it's -- that it does not extend
 6 necessarily to the perimeter of the waste plume but is
 7 somewhat less than that radius, that distance, and as
 8 defined yesterday, it went from 150 feet previously --
 9 approximately in the TexCom application and out to 750
 10 feet; another moving target in this whole scenario.
 11 Q Okay. Is it fair to say you've never
 12 performed any reservoir modeling of any kind?
 13 A That's correct.
 14 Q And I presume you've never reviewed any
 15 reservoir modeling of any kind.
 16 A Well, it depends. If you call the TexCom
 17 application reservoir modeling, I would have to say I
 18 reviewed -- I didn't review the actual modeling of the
 19 BOOST program because I'm not familiar with that, but
 20 I did, of course, review what was available to me in
 21 the application in language that I could understand.
 22 Q Did you understand at any point that there
 23 was an obligation for Greg Casey, for example, to
 24 disclose his modeling files and other expert
 25 disclosures to the other parties in this case?

1 A Yes. I think that was done.
 2 Q Did you review any of those materials?
 3 A No, I'm not familiar with that program, and I
 4 guess what I saw I did just a -- just scanned over it.
 5 I didn't see summary-type information.
 6 In other words, one of the things I was
 7 looking for was actually under a day-to-day operation
 8 with 1,250 pounds of injection pressure how far out
 9 was that actual cone of influence, and I couldn't come
 10 up with that type of information.
 11 So I really didn't spend much time or
 12 try to do further research into the actual modeling
 13 that was performed by TexCom.
 14 Q Okay. Do you consider yourself an expert in
 15 designing or permitting underground injection control
 16 facilities?
 17 A No.
 18 Q You do consider yourself an expert in
 19 pipeline design though. Right?
 20 A Yes.
 21 Q Do you think it makes sense for a pipeline to
 22 have what's called a secondary containment system?
 23 A Typically not.
 24 Q Did you -- we've been talking mostly about
 25 experience in designing and -- designing and

1 management of pipelines, but I also understand you
 2 also worked on the installation of a visbreaker unit
 3 at a refinery in California. Do you recall that
 4 experience?
 5 A Yes.
 6 Q What is a visbreaker unit in a sentence or
 7 two?
 8 A Oh, gosh.
 9 JUDGE WALSTON: Could you say that --
 10 what unit?
 11 MR. LEE: It's called a visbreaker unit,
 12 and I believe it's V-I-S breaker.
 13 A V-I-S-B-R-E-A-K-E-R.
 14 Q (By Mr. Lee) Maybe I'll try it -- is a
 15 visbreaker unit a piece of equipment that takes
 16 petroleum product and further refines it to extract
 17 further marketable products?
 18 A That's correct.
 19 Q So I've never seen a visbreaker unit, but I
 20 would imagine it is something that has lots of pipes
 21 going this way and that and moving products around
 22 and -- is that correct? Would it be something that
 23 would have lots of pipes?
 24 A Yes.
 25 Q Were you -- and those pipes contain -- what

1 do those pipes contain generally, hydrocarbons --
 2 A That's correct.
 3 Q -- hydrocarbon products; you know, could be
 4 gasoline, things of that nature?
 5 A Well, I'm not a process engineer and was not
 6 involved in actually the process design for that
 7 installation. However, gasoline is already extracted
 8 prior to the materials getting to the visbreaker.
 9 Typically what the visbreaker does is
 10 take what normally may have been in the last, let's
 11 say, tower in a refining process where the bottoms --
 12 typically referred to as the bottoms -- may have been
 13 a product that was sold, marketed for asphalt, but
 14 with the addition of a visbreaker, you can take these
 15 bottoms that were typically marketed as asphalt, let's
 16 say, and further refine it to get -- to extract more
 17 marketable products that one could sell at a higher
 18 price.
 19 Q I see.
 20 A So there's the economic incentive of
 21 installing a visbreaker unit.
 22 Q I see. Did you have any concerns when you
 23 were involved in the installation of that facility
 24 about leaks or spills from any of the pipes at that
 25 facility?

1 A Well, that's always a concern.

2 Q With any type of industrial operation?

3 A Sure. I mean, that's certainly something
4 that's taken into consideration, and that's why
5 engineers design the facilities to ensure that you're
6 not going to have that.

7 Q What was the principal physical safeguard
8 that was put in place at this facility to make sure
9 that if there was a spill or leak or something
10 unexpected happened it would not contaminate soil or
11 the groundwater?

12 A As a typical refinery setting, there's a
13 concrete pad. Actually, throughout the whole refinery
14 process unit, there's a concrete pad, and there are
15 what's called oily water sumps. If there were a leak,
16 the leak is contained.

17 The concrete, of course, keeps it from
18 penetrating into the ground, and the design of the pad
19 has slopes where material would be sloped to an oily
20 water slump. That goes to an API separator where the
21 oil would be skimmed off of water. Obviously, what
22 I'm referring to is oily water sumps. They're open
23 grates, and when it rains, it's also rainwater that
24 goes into those sumps, into those collection basins,
25 if you will. So that material could be actually some

1 rainwater, and if there were a leak, whatever the
2 material was would be routed through that oily water
3 sump system to an API separator where the oil would
4 then be separated from the water, and that's basically
5 the way the system is set up.

6 Q Okay. Did you feel that that design you just
7 described was sufficient and adequate to protect
8 against the risk of groundwater and soil
9 contamination?

10 A Yes.

11 Q You have some --

12 A May I interject?

13 Q Sure.

14 A There's obviously a maintenance program
15 that's carried on in a refinery, and so that's part of
16 ensuring that the system remains adequate.

17 Q In other words, you've got to, at some
18 frequency, go around and inspect the pipes, and
19 obviously repair them if there's any signs of
20 corrosion or wear and tear, things like that?

21 A Yes.

22 Q You have some criticisms in your testimony
23 about -- maybe I mischaracterized that. You have
24 concerns in your testimony about the tanks that will
25 be at the TexCom facility. Is that correct?

1 A I address some concerns in the deposition
2 that I gave, yes.

3 Q Did you review the surface facility
4 application?

5 A I've actually looked over -- to answer your
6 question, no. The only thing that I'm aware is
7 through the written testimony that I reviewed of the
8 TexCom witnesses where I learned a little bit more
9 than I knew when I gave my deposition.

10 Q Does a pipeline engineer such as yourself
11 need to have any advanced training in geology?

12 A I'm not sure what might be current
13 requirements. I did take a course in geology in my
14 curriculum -- civil engineering curriculum, and I
15 would say that could probably help an engineer,
16 pipeline engineer. I would not say that it would be,
17 even to this day, a prerequisite for a good pipeline
18 engineer.

19 Q It's something that you didn't ever feel like
20 you were inadequate because you lacked any advanced
21 training in geology during your career?

22 A No, we actually also considered soil
23 conditions in design of pipeline systems. It can be
24 an area that you have -- that's -- that has a
25 propensity, because of clays, to high shrinkage --

1 shrinkage and swelling of clays due to changes in
2 moisture content that could create stresses on the
3 corrosion coating on a pipeline, for instance, like a
4 TGF3 enamel coating and even the more modern epoxy
5 coatings on pipelines. So one has to ensure that the
6 pipeline coating, which is part of the cathodic
7 protection system is adequate for the soils through
8 which the pipeline is actually traversing.

9 Q I understand. In your testimony, you have --
10 you make the point that you've done some research and
11 you believe that the 2.5-mile area of review drawn by
12 TexCom on its maps is short.

13 A Yes, sir.

14 Q You go on to say in your testimony that
15 you've identified some oil and gas wells that would be
16 in the sliver of area of review as you've drawn it but
17 outside of the area of review as TexCom has drawn it.

18 A Correct. I feel like TexCom failed to show
19 some of the data that they were required to show by
20 law.

21 Q What is your understanding of the 2.5-mile
22 area of review requirement? What is the purpose of
23 it? I'm sorry. I want to clarify my question.

24 What do you believe the purpose of the
25 2.5-mile area of review is?

1 A I think the purpose, as, I guess, established
2 by the Texas legislature, was to ensure that the
3 public is protected, to require the applicant to
4 consider all penetrations of confining zones, water
5 wells, et cetera, that lie within a
6 two-and-a-half-mile radius from the proposed disposal
7 well.

8 And I think that the legislature was
9 forward looking, as I think I may have stated in my
10 written testimony -- prefiled testimony, and very
11 responsible to consider a two-and-a-half-mile radius,
12 as opposed to something less, to ensure that the
13 safety of the public is, indeed, protected.

14 Q Two follow-up questions. You mentioned the
15 Texas legislature. Is it your understanding that a
16 two-and-a-half-mile radius is something that the
17 legislature requires or would it be more correct that
18 it's something that the TCEQ requires?

19 A I think it's a Texas Administrative Code
20 requirement, and as such, it would be Texas law.

21 Q But the Texas Administrative Code, of course,
22 is promulgated by the TCEQ. Correct?

23 JUDGE WALSTON: If you know.

24 Q (By Mr. Lee) If you know. I'm not trying
25 to --

1 A When you say "promulgated" --

2 Q In other words, the rules in there are rules
3 that have been written by TCEQ in order to implement
4 whatever instructions they've been given by the
5 legislature.

6 A Well, of course, I'm not an attorney. I'm
7 not exactly sure how it works. As I made a correction
8 in my original prefiled testimony, my initial work was
9 looking at the TCEQ guidelines, the instructions to
10 the applicant for preparing the application.

11 Well, I knew that there had to be some
12 state law that governed that. So I think I mentioned
13 to you in my deposition that I did go back and look at
14 30 TAC -- I think it's 331.121, and I think there were
15 also maybe a few other references to Title 30.

16 I looked at those to see how the state
17 law or how the TCEQ instructions mirrored the state
18 law, and it appears that it's -- it follows the state
19 law. So there is a direct reference or link back
20 through what I did to the requirements of state law.

21 Q So you identified four wells that are in this
22 sliver we described earlier, but those are outside of
23 the cone of influence we've been talking about. Is
24 that correct?

25 A That's correct.

1 Q I mean, the well is outside. The cone of
2 influence is roughly 750 feet, and we're talking about
3 two-and-a-half miles away from the site?

4 A Yes.

5 Q Mr. Wilson, I would like to talk now about
6 sort of the -- what I interpret to be as sort of the
7 main point in your testimony, which involves the
8 calculations you performed involving hydrostatic
9 pressures.

10 I guess the first thing I would like to
11 do is review what it is that you did and why you did
12 it. And I'm going to try to describe my understanding
13 of what you did and stop and ask you to either confirm
14 or deny what I describe -- how I describe what you
15 did.

16 A Fine.

17 Q My understanding is that you started out by
18 doing two calculations. You did one calculation,
19 which is what you believe to be the pressure exerted
20 at the bottom of TexCom's proposed injection wells
21 based on the injection pressure, the weight of the
22 fluid and the height of the injection well basically.
23 Would that be a fair characterization of the first
24 calculation you did?

25 A That's correct. And the weight is directly

1 proportional to the height that you mentioned. It's
2 essentially the same thing.

3 Q So Calculation No. 1, as we've described,
4 involves nothing but TexCom's own proposed injection
5 well?

6 A Correct.

7 Q You also did a second calculation, which is a
8 calculation that you believe would be exerted downward
9 in an abandoned -- hypothetical abandoned water well
10 with drilling mud still left in it?

11 A Correct.

12 Q And you would describe that as an unplugged
13 drilling well. Correct?

14 A No.

15 Q Why not?

16 A Well, the calculation I did was in accordance
17 with TCEQ guidelines for a well that had been properly
18 abandoned and actually contained a mud plug.

19 Q Mud plug, okay. But not -- normally when you
20 plug a -- my understanding is normally when you plug
21 an oil well when you're done using it, you don't just
22 leave drilling mud and the mud that's actually left in
23 there. You actually fill it with concrete or
24 something?

25 A I don't think so.

1 JUDGE WALSTON: But just so the record
 2 is clear, your calculation assumed a mud plug?
 3 A That's correct. I followed the TCEQ
 4 guidelines using a nine-pound-per-gallon mud since one
 5 did not have the records on the wells and also
 6 considered the guidelines of TCEQ for calculation of
 7 the gel strength, in combination of the actual
 8 pressure due to the static weight of the mud and the
 9 other pressure component being the gel strength, make
 10 up the total pressure exerted by the mud plug and the
 11 pressure that would have to be overcome to displace
 12 that mud plug.
 13 Q (By Mr. Lee) I think I understand. That's
 14 your second calculation you did, and that doesn't
 15 involve -- that doesn't involve any -- you're not
 16 thinking of any particular well when you did that
 17 calculation. It's a hypothetical well. Is that
 18 right?
 19 A That is correct.
 20 Q So, in other words, a hypothetical well that
 21 in this hypothetical would be located adjacent to the
 22 TexCom injection well?
 23 A Right.
 24 Q And, in fact, completed at the same depth
 25 into the lower Cockfield as the TexCom injection well?

1 A What I did, Mr. Lee, was basically follow the
 2 TexCom application, looking at what they used.
 3 TexCom, of course, used an abandoned well in their
 4 calculations that was 6,045 feet deep, which was the
 5 same depth as the top of the actual injection interval
 6 of the disposal well. TexCom also used a seven-inch
 7 casing for the abandoned well. So I used the same
 8 thing in my calculations.
 9 Q Just to clarify, you also used the same
 10 depth?
 11 A That's correct.
 12 Q So you have a TexCom injection well. Then
 13 you have a hypothetical abandoned oil well with
 14 drilling mud in it, completed down into the lower
 15 Cockfield, and I think you said -- maybe I said and
 16 you agreed with me -- that it would be adjacent to the
 17 TexCom injection well. Right?
 18 A Well, it's a hypothetical.
 19 Q Well, in your hypothetical, how far away is
 20 it from the TexCom injection well?
 21 A Well, from -- after calculating that
 22 information, then I actually took a look at Railroad
 23 Commission records to see which wells -- abandoned
 24 wells existed and where those wells were in relation
 25 to the proposed disposal wells of TexCom.

1 Q I understand. My question is, in your
 2 hypothetical -- in your analysis, how close is this
 3 hypothetical well?
 4 A And my answer --
 5 Q What does that matter?
 6 A Well, a hypothetical well could be right out
 7 here on Thompson Street. The hypothetical part of it
 8 means nothing unless you're relating it back to the
 9 proximity to the actual disposal wells.
 10 Q So it could be -- in your analysis, it
 11 doesn't matter that the abandoned well is two inches
 12 from the TexCom well or two miles?
 13 A No, it does matter. And that's why one has
 14 to actually look at the location relative to the
 15 location of a proposed disposal well.
 16 Q Okay. Getting back to my line of questioning
 17 I was trying to go with, we have Calculation No. 1,
 18 which is the TexCom injection pressure; Calculation
 19 No. 2, which is this hypothetical abandoned well.
 20 And Mr. Casey did those two calculations
 21 as well. Correct?
 22 A Yes.
 23 Q He did a calculation for TexCom's injection
 24 well, how much pressure -- and I used the silly
 25 analogy in my deposition of you -- how much pressure

1 would I feel if I put my hand at the bottom of the
 2 TexCom injection well?
 3 And I realize that's silly because
 4 that's a lot of pressure and you would need a pressure
 5 gauge, but if you put a pressure gauge at the bottom
 6 of the TexCom injection well, you calculated what you
 7 believe a reading would be when TexCom is injecting at
 8 full injection capacity.
 9 A Yes.
 10 Q And you did the same thing for this abandoned
 11 well. I think I'm beating this to death. I'm sorry.
 12 Mr. Casey did those two calculations as
 13 well, and then is it your understanding that he then
 14 took those calculations and used them in a reservoir
 15 modeling analysis?
 16 A I'm not sure what all he used in his actual
 17 modeling, if you will, and one of the problems I had
 18 in trying to follow the TexCom application was that I
 19 never did see the actual calculation that Mr. Casey
 20 did to compare the pressure that I calculated at the
 21 injection interval -- at the wellbore of the injection
 22 well.
 23 So his calculation is shown for the
 24 actual resistive forces, let's say, or the pressure
 25 associated with an abandoned well with the mud plug,

<p style="text-align: right;">Page 671</p> <p>1 and he went on to, of course, state what the maximum 2 allowable increase in formation pressure was, but I 3 didn't see what his pressure calculation was. I don't 4 remember seeing that, what the pressure calculation 5 was right at the wellbore. 6 So I tried to follow a more methodical 7 approach in my evaluation to get the full, big picture 8 and make a comparison of pressures. 9 Q Okay. Would you agree with me that the 10 purpose of Greg Casey's reservoir modeling was to 11 determine what pressure will be exerted by the TexCom 12 injection well and then determine, through reservoir 13 modeling, how that pressure dissipates throughout the 14 reservoir? 15 A I think that should have been a, yes, major 16 undertaking. And, again, I'm just kind of perplexed, 17 even to this day, of how things keep changing with 18 TexCom from his calculation that is stated in the 19 application of a 456 psi increase of 150 feet from the 20 wellbore, and now we learned yesterday that, no, 21 that's not right. It's 750. 22 JUDGE WALSTON: Mr. Wilson, I don't mean 23 to cut you off, but you need to try and just answer 24 his questions as succinctly as you can -- 25 A Yes, Your Honor.</p>	<p style="text-align: right;">Page 673</p> <p>1 A I'll just say that, yes, I think he did his 2 modeling, and hopefully it's correct. 3 Q I'll try to finish up. Basically, in your 4 analysis, you're basically treating TexCom's proposed 5 injection well and this hypothetical oil well as if 6 they were conducted by a U tube, a pipe, and you've 7 calculated that when you exert pressure over here, it 8 flows through the U tube, or nothing for that matter, 9 and then starts to unplug an abandoned oil well? 10 A I have an exhibit, which I guess one could 11 come to that conclusion, although in my written 12 testimony, you'll see that I acknowledge that there 13 would be some pressure dissipation. 14 I mean, obviously there will be some 15 pressure dissipation from the wellbore outward -- 16 Q There will be a lot of pressure dissipation 17 because we're going through rock. 18 A I agree. And I felt, just from my 19 engineering judgment, that that pressure would 20 definitely be out further than 150 feet, which 21 yesterday we determined that, yes, it's more like 22 750 feet. 23 Q Mr. Wilson, you really don't have any 24 experience in evaluating how quickly pressure 25 dissipates within the geologic formation, do you?</p>
<p style="text-align: right;">Page 672</p> <p>1 JUDGE WALSTON: -- and then Mr. Forsberg 2 can ask you some questions. 3 A I'm sorry. 4 JUDGE WALSTON: That's okay. 5 Q (By Mr. Lee) I think you started out by 6 agreeing with me that the point of Mr. Casey's 7 reservoir modeling, as you understand it and as 8 explained in his testimony and as he's been explaining 9 Wednesday and Thursday of this week, really the whole 10 point of it was to figure out, "I've got this pressure 11 that I'm exerting by putting this well in, and I'm 12 going to have a pump and I'm going to have the weight 13 of the fluids, and they're going to empty down in the 14 bottom in this injection zone, and it's going to 15 increase the pressure over time, and as it builds up 16 over time, year after year after year, after 30 years 17 what will be the pressure increase at various 18 distances from the well." Right? 19 A I agree that that's what should have been 20 done, and that should have been the purpose of this 21 work. 22 Q You just think Mr. Casey just didn't do that? 23 A Well, it's -- I guess, to this day, I don't 24 know how accurate his information is and so forth. 25 Q Did he say he did?</p>	<p style="text-align: right;">Page 674</p> <p>1 A That's correct. 2 MR. LEE: No further questions. 3 Q (By Mr. Lee) Thank you, Mr. Wilson. 4 A Thank you. 5 JUDGE WALSTON: Executive Director? 6 CROSS-EXAMINATION 7 BY MS. GOSS: 8 Q Mr. Wilson, I'm Diane Goss. I have a couple 9 of questions for you. 10 A Good morning. 11 Q How are you? 12 A Great. 13 Q Mr. Lee asked you about the visbreaker, and I 14 had a follow-up question to that. Do you know if the 15 refined product from that process that you described, 16 the tank bottoms, do you know if that further refined 17 product in this case, if it was in a pipe that had 18 ruptured and there was a leak that that would be a 19 hazardous waste? 20 A I don't know how that would be classified. 21 Q That's fair. Regardless of the 22 classification of that waste, if there was a spill; 23 say, you had a cement pad that you described with the 24 sumps collecting that oily wastewater, do you know if 25 that would be discharged to the surface waters after</p>

1 the oil is skimmed off?

2 A Actually, I've never been involved with that
3 part of the process in a refinery. Most of my
4 experience is with pipelines and -- although I did
5 several refinery projects. So I'm not sure what
6 happens after the API separator.

7 Q And would you believe that that cement pad
8 with the sumps would be sufficiently protective of the
9 environment in the case of a leak?

10 A If it was maintained properly, yes.

11 MS. GOSS: Thank you very much. That's
12 all my questions.

13 A Thank you.

14 JUDGE WALSTON: Redirect?

15 MR. FORSBERG: Briefly, Your Honor.

16 REDIRECT EXAMINATION

17 BY MR. FORSBERG:

18 Q Mr. Wilson, you were asked some questions
19 regarding the work of Mr. Casey. Is that correct?

20 A Yes.

21 Q Is there anything in the totality of
22 Mr. Casey's work that you find troubling?

23 A Yes, there is.

24 Q Could you explain that, please?

25 A Well, at least what comes to my mind, what

1 I'm thinking about, is the fact that all of the
2 abandoned wells were supposedly identified and that
3 all the abandoned wells were completed in the upper
4 Cockfield formation and I feel like TexCom did not
5 properly identify all the abandoned wells and that
6 some of their research is in error, and that there's
7 still a very -- there's still a potential problem that
8 exists with abandoned wells in the immediate vicinity
9 of the TexCom proposed injection wells.

10 Q Is there any specific information you learned
11 from Mr. Casey recently that would suggest that their
12 information regarding wells is incorrect?

13 A Yes. I actually took notes when Mr. Riley
14 was up at the board -- easel, explaining very
15 diligently to us, to the Court, which TexCom wells --
16 for which TexCom wells they had found records that
17 were up to, I guess, the day before yesterday missing.

18 Mr. Riley showed the Railroad Commission
19 well number associated with the TexCom well number,
20 and I can only assume that the records that -- from
21 the Railroad Commission that TexCom presented, I
22 suppose as exhibits, were accurate.

23 However, in looking back at the work
24 that I did, I think TexCom made an error in their
25 research of records. For instance -- let me refer

1 back to the notes that I copied down from the work
2 that Mr. Riley did -- and please correct me,
3 Mr. Riley, if I took something down incorrectly -- but
4 for TexCom Well C428 --

5 JUDGE WALSTON: Do you want us to put
6 the exhibit up? Would that be helpful?

7 A Well, it might. I can -- I have the numbers
8 here, but if you would like to put it up, that's fine.

9 JUDGE EGAN: It would be -- I believe
10 it's 68. It's either 67 or 68.

11 (Brief pause)

12 A Thank you, Mr. Riley. Mr. Riley, you showed
13 yesterday, at quite length, that TexCom Well C428 --
14 428 --

15 JUDGE WALSTON: It's the bottom one.

16 A Actually, the way the paper is folded, I
17 can't -- okay. My notes are correct. You showed 428
18 as being Railroad Commission Well No. 29. In
19 actuality, Well C428, as shown by TexCom in the
20 application, corresponds to Railroad Commission Well
21 129, and not Well 29. So I don't know if possibly I
22 missed something along the way, but based on what you
23 presented to the Court, Well C428 is actually Railroad
24 Commission Well No. 129, which is a well that I had
25 identified, from my review of the Texas Railroad

1 Commission website.

2 I did not go to Austin and search for
3 records, but from the website, your well -- TexCom
4 Well C428 is actually Railroad Commission 129, for
5 which there are no records. So even though records
6 were found for other wells that previously seemed to
7 have no records through the diligent search of TexCom
8 in its preparation of its application, all of a
9 sudden, we have records that start showing up on the
10 first day of this case hearing, and so we've had a
11 moving target, it seems like, all through this
12 process.

13 The point I want to make is -- to the
14 Court is there apparently is still one well that is
15 within a stone's throw of a proposed TexCom disposal
16 well for which there are no records, and I would
17 maintain that this is a very serious thing. Maybe
18 adding to some of the testimony of yesterday --

19 Q (By Mr. Forsberg) Let me stop you there and
20 just move on to the next question, or kind of clarify
21 the question.

22 When you consider the fact that you --
23 I'm sorry. You had mentioned that you just learned
24 about some wells from Mr. Casey within the last couple
25 of days.

1 Based upon your experience in the
 2 engineering field, with an educational background as
 3 an engineer, is the type of work that is being
 4 displayed by Mr. Casey appropriate in regards to the
 5 TexCom application?
 6 MR. LEE: Objection, Your Honor. I
 7 don't think Mr. Wilson has the qualifications to opine
 8 on what Mr. Casey did was accurate or inaccurate.
 9 JUDGE WALSTON: I'll overrule the
 10 objection. I'll let him answer.
 11 A Could I ask you to repeat the question,
 12 please? I'm not sure exactly --
 13 Q (By Mr. Forsberg) Based upon the activities
 14 that you've seen Mr. Casey conduct and listened to his
 15 testimony and providing new information on wells the
 16 first day of the hearing, based upon your experience
 17 and education in the engineering field, do you find
 18 his activities appropriate?
 19 A I would have to say no. You know, in all of
 20 my career, I've strived for a complete product before
 21 it was presented to management. What I say "a
 22 complete product," it was free of errors. I can
 23 assure you where I worked for 24 years for a
 24 particular employer that I probably would not have
 25 lasted 24 years there if I had presented work in the

1 manner that I've seen presented in this application to
 2 TCEQ.
 3 Q Now, you were asked a question with regards
 4 to where you live in comparison to the subject well.
 5 Do you remember that?
 6 A Yes.
 7 Q And you are -- and identified yourself as an
 8 individual protestant in this case. Is that correct?
 9 A Yes.
 10 Q Did that fact at all shade your calculations
 11 and review of the TexCom application?
 12 A Not at all. I'm a professional, and I do my
 13 work to the best that I can in a professional manner.
 14 Q Do you have any general dislike or opinion
 15 that underground injection wells should never be used?
 16 A Oh, no, not at all. I'm certainly not
 17 opposed to underground injection wells. I have
 18 absolutely no opposition to that. I think, if done
 19 properly in the right location, it is a very
 20 acceptable way to dispose of industrial waste.
 21 Q Thank you, Mr. Wilson.
 22 MR. FORSBERG: I'll pass the witness.
 23 JUDGE WALSTON: Okay. Any recross from
 24 Lone Star?
 25 MR. GERSHON: No.

1 JUDGE WALSTON: From the county?
 2 MR. WALKER: No, sir.
 3 JUDGE WALSTON: Public interest counsel?
 4 MS. COLLINS: No.
 5 JUDGE WALSTON: Any recross?
 6 MR. RILEY: Can we have just a moment?
 7 Actually, Judge, it's about ten o'clock. Could we
 8 have a brief break and then resume?
 9 JUDGE WALSTON: Sure; we can do that.
 10 Why don't we take -- we'll go ahead and take a
 11 15-minute break. We'll resume at 10:20.
 12 (Recess: 10:06 a.m. to 10:22 a.m.)
 13 JUDGE WALSTON: If everybody would be
 14 seated and be quiet, we'll get started. We'll go back
 15 on the record.
 16 And we had a brief discussion with
 17 Mr. Forsberg off the record, and we need him to
 18 provide Individual Protestant Exhibits 1 through 19.
 19 We have 20 through 30, but we need 1 through 19, and
 20 you'll provide copies for the court reporter and the
 21 ALJs on Monday?
 22 MR. FORSBERG: Yes, I'll have copies on
 23 Monday, Your Honor.
 24 MR. RILEY: I'm sorry. I apologize for
 25 interrupting, but I'm not sure we ever received

1 Exhibits 1 through 19 either and so --
 2 JUDGE WALSTON: If all the other parties
 3 will check, and if you need copies, let Mr. Forsberg
 4 know. And you can provide those Monday?
 5 MR. FORSBERG: Absolutely.
 6 MR. RILEY: Thank you.
 7 JUDGE WALSTON: Mr. Lee, did you have
 8 any recross?
 9 MR. LEE: Yes, I do.
 10 RECROSS-EXAMINATION
 11 BY MR. LEE:
 12 Q Mr. Wilson, one of the questions Mr. Forsberg
 13 asked you was whether you were biased at all in this
 14 case because of concern about your property value. Do
 15 you recall that question?
 16 A I don't remember him specifically asking me
 17 about property value.
 18 Q Well, he asked you, are you concerned -- you
 19 know, are you biased in this case at all by the fact
 20 that you live near the facility.
 21 A No, I feel like the work that I've -- that
 22 I'm not biased, that the work that I did was
 23 professional as I would have done for anyone else had
 24 I been paid.
 25 Q I'm going to reference a line from your

1 deposition, and you gave a very wordy answer to this
2 question, so I'm not going to read the whole thing,
3 but I'm going to read the relevant part, I think. I
4 asked you, "How much of your interest in this cause is
5 motivated by concern about your property value?" You
6 began your answer by saying, "I would say probably
7 90 percent." Do you recall that?

8 A Well, my concern --

9 Q My question is, do you recall that?

10 A Yes.

11 Q And so doesn't that mean that you do in fact
12 have an interest in this case besides simply offering
13 what you claim to be just professional engineer --

14 A Most certainly; most certainly.

15 Q So it's not true that you just approached
16 this case as a disinterested engineer who's just come
17 in to give his own independent observations?

18 MR. WALKER: Let me object at this time.

19 MR. FORSBERG: Objection.

20 MR. WALKER: I'm sorry, Mr. Forsberg.
21 This is not my witness, but I believe all references
22 to property values and other attendant issues
23 concerning that have been absolutely ruled
24 inadmissible in this proceeding.

25 JUDGE WALSTON: Mr. Forsberg, did you

1 website.

2 Q Why didn't -- but you're criticizing
3 Mr. Casey for not collecting enough records, but you
4 yourself didn't even go and look at them yourself.

5 A No, I sat right at home at my computer and
6 went to The railroad Commission website and did my
7 research electronically.

8 Q Okay. Does the website that you accessed at
9 home have the same information that's in Austin at the
10 Railroad Commission files?

11 A I haven't the slightest idea.

12 Q You don't really know very much about
13 Railroad Commission files, do you?

14 A I have, in years past, been to the Railroad
15 Commission and actually researched some files there,
16 yes.

17 Q When was that?

18 A Before the advent of computers.

19 Q How long ago was that?

20 A Oh, that was, I would say, probably back in
21 the -- say, somewhere between 1976 and maybe 1980.

22 Q You have no knowledge of Railroad Commission
23 files, yet you're criticizing Mr. Casey's engineering
24 work based on the incompleteness or completeness of
25 those files?

1 want to add --

2 MR. FORSBERG: I was going to object
3 that he's mischaracterizing the question I asked and
4 the testimony that Mr. Wilson previously gave in his
5 question.

6 JUDGE WALSTON: I guess you can ask him
7 about if he has any bias, but do stay away from
8 property values because that's been excluded from the
9 hearing.

10 A I'll say this: I would not compromise --

11 JUDGE WALSTON: Let him ask you a
12 question.

13 Q (By Mr. Lee) Mr. Wilson, did you look for
14 well records for Well 129?

15 A Yes.

16 Q Did you find any?

17 A No.

18 Q Were you told that Well 29 is in fact Well
19 29?

20 A Repeat the question.

21 Q Were you told by anybody at the Railroad
22 Commission the reason why they don't have any records
23 for Well 129 is that 129 is the same well as Well 29?

24 A I didn't speak to anyone at the Railroad
25 Commission. I only went to their GIS system on the

1 MR. FORSBERG: I'm going to object, Your
2 Honor. I think it mischaracterizes his previous
3 testimony.

4 JUDGE WALSTON: I'll overrule the
5 objection, and you can answer it if you can.

6 A The best way I could answer that, I think, is
7 that in reviewing the TexCom application, there were a
8 number of pages or all the due diligence, if you will,
9 that TexCom went through to find Railroad Commission
10 records. It was extensive as to all the research that
11 was done. I, therefore, assumed that TexCom did their
12 job and that all the records were found.

13 Q (By Mr. Lee) Isn't -- sorry. Isn't it
14 possible that the mistake that you allege is in the
15 application was not in the application but was a
16 mistake made by Railroad Commission personnel?

17 A Oh, certainly.

18 Q But then you blame Mr. Casey -- in fact, you
19 draw into question his engineering skills based on the
20 fact that somebody at the Railroad Commission might
21 ought to have given him -- given TexCom the complete
22 Railroad Commission records from the --

23 A If it's an error on the part of the Railroad
24 Commission, I certainly don't blame Mr. Casey.

25 Q It sounds like you did.

<p style="text-align: right;">Page 687</p> <p>1 A Well, if Mr. Casey was responsible for 2 gathering the records and they were not properly 3 evaluated by him, then I would say it would point to 4 Mr. Casey. 5 Otherwise, if it's an error that the 6 Railroad Commission has made, then obviously Mr. Casey 7 would have used their information just like I did, and 8 there would be no reflection on his character or 9 capabilities. 10 Q Okay. So you don't know whether -- let me 11 ask it this way: If Mr. Casey went to the Railroad 12 Commission files and was told -- and asked for records 13 for Well 129 and was given the answer, "Well 29 is 14 Well 129, and, therefore, we don't have the records 15 for Well 129 as it's listed on the website," how would 16 that affect Greg Casey's ability to testify in this 17 case or seal the application? 18 A Well, if Well No. 29 was positively 19 identified as the same as Well 129 and that evidence 20 is non-disputable, then I would say that it would be 21 acceptable for the Court. 22 Q You don't know whether that's the case or 23 not? 24 A That's the point I was trying to make. Even 25 yesterday it was brought up in the Court that another</p>	<p style="text-align: right;">Page 689</p> <p>1 A Well 129 shows "plugged oil well." 2 Q What do you interpret that to mean when it 3 says "plugged oil well"? 4 A I interpret that to mean that there is a mud 5 plug in the well. 6 Q How much experience do you have in evaluating 7 oil wells or the oil industry, for that matter, or 8 plugging -- I'm sorry. I want to strike my question 9 and start all over. 10 How much experience do you have in the 11 plugging of oil wells? 12 A I've never been involved -- 13 MR. FORSBERG: Objection, Your Honor. 14 This appears this is not something -- this is recross. 15 It wasn't something that was discussed in redirect. 16 MR. LEE: If I could respond? 17 JUDGE WALSTON: Yes. 18 MR. LEE: There was questions about what 19 he's -- he's focused now on Well 129. I'm asking a 20 specific question about Well 129. 21 JUDGE WALSTON: I'll overrule the 22 objection. Do you remember the question? 23 A I've never been involved in the plugging of 24 an oil well. 25 Q (By Mr. Lee) So you're just making an</p>
<p style="text-align: right;">Page 688</p> <p>1 well -- I forget which one it was -- was it C4 -- that 2 was -- you weren't sure whether it was in one survey 3 or the other, the Howell where the site is, or I think 4 it was the Smith -- Lemuel Smith maybe -- survey, five 5 miles away. There was confusion there. 6 So I'm not saying that the Railroad 7 Commission could not make a mistake in their records, 8 but what does one -- you know, what did I have to work 9 with? I worked with what was available to me, and I'm 10 sure Mr. Casey probably did the same thing. 11 Q Well, but it sounds like you have a criticism 12 of him, that he did something -- that he did not do 13 something that he should have done, but you yourself 14 didn't do that. 15 You could have -- the Railroad 16 Commission files in Austin are available to the 17 public, too. Right? 18 A Yes. I didn't have TexCom paying me to go to 19 the Railroad Commission. 20 Q Okay. I didn't ask that question, 21 Mr. Wilson. 22 A I have limited resources. 23 Q I didn't ask a question. When you looked at 24 Well 129 on your website, did it indicate whether 129 25 was plugged or not plugged?</p>	<p style="text-align: right;">Page 690</p> <p>1 assumption about what it means when it says plugged? 2 A To answer that question, I'm not making an 3 assumption. In the information that I've gathered 4 from review of the TCEQ instructions for evaluating an 5 abandoned well, you know, plugged wells are definitely 6 something that have to be considered. 7 Q Okay. 8 A And I'll, I guess, go further to say wells 9 with mud plugs. 10 Q Okay. How did you account for Well 129 in 11 your analysis? 12 A Well 129 only indicated that the Railroad 13 Commission had no records, and we do not know -- you 14 could say that the fact that they state that it is 15 plugged is part of a record, but the main concern, as 16 I'm sure all can appreciate, is that we don't know the 17 depth of that well. 18 Q How did you account for Well 129 in your 19 analysis? 20 A Showing that it's a well for which there are 21 no records. 22 Q How did you account for the distance between 23 the TexCom proposed well and Well 129 in your 24 analysis? 25 A Without referring back, I think it was one of</p>

1 the wells that was within 150 feet of a proposed
2 TexCom injection well.

3 Q Now you're relying on the cone of influence
4 as calculated by TexCom, not your own analysis. I'm
5 asking about the analysis that you did where we had a
6 hypothetical well and a TexCom injection well.

7 In response to Mr. Forsberg's questions,
8 you've identified Well 129 as the well that you are
9 concerned with because there are not -- you have not
10 seen any records for that well -- in your opinion, you
11 have not seen any records for that well. And what I'm
12 asking you is, how did you account for Well 129 in
13 your analysis or did you?

14 A My written testimony would show that for
15 wells that there are no records, one cannot assume
16 that the well was completed in the upper Cockfield,
17 and, therefore, it could definitely be a source for
18 migration of injected waste up into our aquifers
19 through corroded casing.

20 Q Okay.

21 A In my --

22 Q If I were to look in your testimony or any of
23 your exhibits, would I see any calculation or opinions
24 or anything else based on the distance between the
25 TexCom wells and Well 129, or any other well for that

1 matter?

2 A You would see references to distance; yes,
3 you would.

4 Q Those references are not incorporated into
5 any of your calculations upon which you base your
6 conclusions, are they?

7 A Repeat the question.

8 Q The distances between a TexCom well and Well
9 129, or any other well for that matter, are not
10 incorporated into your calculations. In other words,
11 it doesn't matter -- in your calculations, in your
12 analysis where you determined that the pressures are
13 too great and will cause endangerment, you did not
14 take into account any distances whatsoever?

15 A That's incorrect.

16 Q Would you point to me in your testimony,
17 which lays out your calculations, where I would see
18 different results based on the distances away from the
19 TexCom well?

20 A Well, in my calculations and in my exhibits,
21 I do not show a horizontal distance from an injection
22 well to an abandoned well. I use TexCom's own
23 information about distances. And in my testimony, I'm
24 very clear about the fact that wells within the
25 150 feet -- three wells identified by TexCom within

1 150 feet of disposal wells would certainly be within
2 jeopardy. TexCom's own calculations show that at 150
3 feet the pressure -- increase in formation pressure
4 was greater than the allowable pressure. Your own
5 calculations show that.

6 Q And Mr. Casey -- you've read Mr. Casey's
7 testimony and you listened to him testify, and he
8 explained why for those wells within the cone of
9 influence there is not a risk of endangerment. Did
10 you hear that testimony?

11 A If I did, I certainly don't agree with that.
12 I think the entire --

13 Q But you heard it. My question was whether
14 you heard that testimony.

15 A Repeat the question.

16 Q The question was simply whether you heard
17 Mr. Casey's explanation for those wells that are
18 within the cone of influence.

19 A Yes, assuming they were all completed in the
20 upper Cockfield.

21 Q I just want to know if you heard it. Isn't
22 it true that if you wanted to do analysis of what the
23 risk was for injected waste coming up through Well
24 129, you would have to know how quickly the pressure
25 dissipates from the TexCom well underground?

1 A Yes.

2 Q You do not know that, do you?

3 A I know now from listening to testimony
4 yesterday about the cone of influence extending out to
5 750 feet.

6 Q That's Mr. Casey's analysis. Right?

7 A Yes.

8 Q So you agree with some of his analysis but
9 not all of his analysis?

10 A Well, I have to make the assumption that
11 Mr. Casey is capable of doing those calculations, and
12 I can't refute, and have not even tried to -- from my
13 written testimony, one would see that I used the
14 actual TexCom data in my evaluation, in my
15 presentation, in my written testimony.

16 So if Mr. Casey said he made a
17 mistake -- and we're all subject to mistakes, and now
18 that cone of influence is actually 750 feet --

19 Q Mr. Wilson, that's really not what I asked.

20 A It seems like it is. I'm trying to answer
21 your question.

22 JUDGE WALSTON: You're going beyond it
23 now. He just asked you, did you rely on Mr. Casey's
24 calculations for the dissipation of pressure.

25 Q (By Mr. Lee) And I believe you said in your

<p style="text-align: right;">Page 695</p> <p>1 answer that you have to assume that Mr. Casey is 2 qualified to make those calculations. Right? 3 A Yes. 4 Q And are you qualified to make those 5 calculations? 6 A No. 7 Q There's one last question I have. You 8 mentioned in response to Mr. Forsberg's question that 9 you're not concerned about well disposal generally, as 10 a general proposition. 11 A Well, I'm very concerned about it. 12 Q I understand you're concerned about this 13 particular project, but I believe your answer to 14 Mr. Forsberg was that -- 15 A Yes. My testimony was -- 16 Q -- you were not concerned about injection 17 wells generally, that you don't have a bias towards 18 disposing of waste by injection well? 19 A That's correct. 20 Q Did you hear Mr. Langhus' testimony yesterday 21 about the 54 Class II wells that are currently 22 depositing waste from oil and gas fields directly into 23 the USDW? 24 A Yes. 25 Q Why -- are you concerned about those?</p>	<p style="text-align: right;">Page 697</p> <p>1 JUDGE WALSTON: Any redirect? 2 MR. FORSBERG: Very briefly, Your Honor. 3 FURTHER REDIRECT EXAMINATION 4 BY MR. FORSBERG: 5 Q On any map that you have seen of the well 6 site that identifies the old abandoned oil wells, have 7 you seen Well 29 and 129 in the same geographic 8 location? 9 A Yes. 10 Q Are they at the same latitude and longitude? 11 A No. 12 Q Is it your belief, based upon that, that 29 13 and 129 are different wells? 14 A Yes. 15 Q And you are here, as you testified earlier I 16 believe, really in two capacities. Is that correct? 17 A I suppose that would be correct. 18 Q You have an engineering capacity and an 19 individual protestant capacity. 20 A Yes. 21 Q Is that fair? And in response to a question 22 regarding concern for property values that was raised 23 by TexCom's counsel, in deposition you had responded 24 that you did have concerns about property values. Is 25 that fair?</p>
<p style="text-align: right;">Page 696</p> <p>1 A I actually am concerned about those. 2 Q Tell me everything you have done to 3 investigate or otherwise evaluate any of those 54 4 wells. 5 A I haven't done anything. I just learned 6 about it yesterday. 7 Q Those are wells -- I want to know what your 8 understanding of those wells are. You understand that 9 those wells are wells that inject waste that, if it 10 were not for a legal exception, could be classified as 11 hazardous waste? 12 A That -- I didn't actually pick up on that 13 understanding. It may be non-hazardous. I'm not 14 sure. 15 Q Okay. You don't know what's being deposited 16 in those Class II wells, do you? 17 A No. 18 Q Okay. 19 MR. LEE: Just a moment. 20 (Brief pause) 21 MR. LEE: Nothing else. No further 22 questions. 23 JUDGE WALSTON: Any further questioning 24 by the Executive Director? 25 MS. GOSS: No.</p>	<p style="text-align: right;">Page 698</p> <p>1 MR. LEE: Objection, Your Honor. 2 JUDGE WALSTON: What? 3 MR. LEE: You wouldn't let me ask 4 questions about property values, and now Mr. Forsberg 5 wants to ask questions about property values. 6 MR. FORSBERG: Well, he answered the 7 question about property -- he asked if my client was 8 biased based upon a deposition answer related to 9 property values. 10 JUDGE WALSTON: Yeah, but both you and 11 the county made an objection, and I sustained the 12 objection. 13 MR. FORSBERG: Okay. So just for the 14 record, the answer he gave to that question isn't 15 considered? 16 JUDGE WALSTON: Right. 17 Q (By Mr. Forsberg) Any personal feelings you 18 have regarding the TexCom proposed permit that we're 19 here about today relates to your individual capacity 20 and not your engineering capacity. Is that fair? 21 A Repeat the question. 22 Q Any personal feelings you have against the 23 TexCom facility and proposed permits relates to your 24 individual capacity as a protestant and not your 25 engineering capacity.</p>

<p style="text-align: right;">Page 699</p> <p>1 A That's correct.</p> <p>2 Q Thank you.</p> <p>3 MR. FORSBERG: Nothing else, Your Honor.</p> <p>4 JUDGE WALSTON: Any further cross?</p> <p>5 (No response)</p> <p>6 JUDGE WALSTON: Thank you, Mr. Wilson.</p> <p>7 A Thank you, Your Honors.</p> <p>8 JUDGE WALSTON: So if I recall</p> <p>9 correctly, were we going to move to county witnesses</p> <p>10 next?</p> <p>11 MR. WALKER: I believe that's correct,</p> <p>12 Your Honor. We're prepared with our first witness.</p> <p>13 JUDGE WALSTON: Okay. Call your first</p> <p>14 witness.</p> <p>15 MR. WALKER: Dr. Paul Pearce.</p> <p>16 (Witness sworn)</p> <p>17 JUDGE WALSTON: Hang on just a minute</p> <p>18 and let us find our notes.</p> <p>19 (Brief pause)</p> <p>20 JUDGE WALSTON: All right. Go ahead.</p> <p>21 MR. WALKER: Thank you, Your Honor.</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 701</p> <p>1 if you were giving that testimony live in person from</p> <p>2 the stand?</p> <p>3 A Yes, I do.</p> <p>4 MR. WALKER: Your Honors, the aligned</p> <p>5 protestants would offer into evidence the prefiled</p> <p>6 testimony and exhibits of Dr. Paul Pearce, which are</p> <p>7 marked as Protestants Exhibits 2 and 2A through 2B.</p> <p>8 And let the record reflect that we're</p> <p>9 providing two copies to the court reporter.</p> <p>10 JUDGE WALSTON: And just from memory, I</p> <p>11 don't recall. Were any objections sustained or made</p> <p>12 to Dr. Pearce's testimony?</p> <p>13 MR. WALKER: There were no objections</p> <p>14 sustained as I recall.</p> <p>15 MR. RILEY: There were some objections</p> <p>16 made but not sustained.</p> <p>17 JUDGE WALSTON: Then Dr. Pearce's</p> <p>18 testimony, AP 2 and Exhibits AP 2A and B are admitted.</p> <p>19 (AP Exhibit Nos. 2, 2A and 2B marked and</p> <p>20 admitted)</p> <p>21 MR. WALKER: At this time, we will pass</p> <p>22 the witness for cross-examination.</p> <p>23 JUDGE WALSTON: Lone Star?</p> <p>24 MR. HILL: No questions of this witness,</p> <p>25 Your Honor.</p>
<p style="text-align: right;">Page 700</p> <p>1 PRESENTATION ON BEHALF OF THE ALIGNED PROTESTANTS</p> <p>2 MONTGOMERY COUNTY AND CITY OF CONROE</p> <p>3 PAUL J. PEARCE,</p> <p>4 having been first duly sworn, testified as follows:</p> <p>5 DIRECT EXAMINATION</p> <p>6 BY MR. WALKER:</p> <p>7 Q Would you state your name for the record,</p> <p>8 please, sir?</p> <p>9 A My name is Paul Pearce.</p> <p>10 Q Just briefly, Dr. Pearce, how are you</p> <p>11 employed?</p> <p>12 A I am the president of Nova Biologicals.</p> <p>13 Q Dr. Pearce, have you been retained in this</p> <p>14 particular hearing to provide expert testimony?</p> <p>15 A Yes, I have.</p> <p>16 Q In that regard, have you previously given</p> <p>17 some prefiled testimony?</p> <p>18 A Yes, I have.</p> <p>19 Q Have you had an opportunity to review that</p> <p>20 prefiled testimony?</p> <p>21 A Yes.</p> <p>22 Q Dr. Pearce, do you have any corrections to</p> <p>23 that prefiled testimony at this time?</p> <p>24 A I do not.</p> <p>25 Q Do you adopt that prefiled testimony today as</p>	<p style="text-align: right;">Page 702</p> <p>1 JUDGE WALSTON: Individual protestants?</p> <p>2 MR. FORSBERG: No questions, Your Honor.</p> <p>3 JUDGE WALSTON: Public interest counsel?</p> <p>4 MS. COLLINS: Just a few questions.</p> <p>5 CROSS-EXAMINATION</p> <p>6 BY MS. COLLINS:</p> <p>7 Q Dr. Pearce, you testified as to the -- I'll</p> <p>8 call it nonspecificity of the wastestream. Correct?</p> <p>9 A I did.</p> <p>10 Q Okay. You also testified that you didn't</p> <p>11 believe this project was in the public interest.</p> <p>12 Correct?</p> <p>13 A That's correct.</p> <p>14 Q Did you review the public interest</p> <p>15 demonstration in the application?</p> <p>16 A I don't recall that.</p> <p>17 Q Okay. Do you recall a portion of the</p> <p>18 application that dealt with potential alternatives of</p> <p>19 waste disposal?</p> <p>20 A Yes.</p> <p>21 Q Okay. And you reviewed that?</p> <p>22 A Yes.</p> <p>23 Q Okay. In your opinion, does the feasibility</p> <p>24 of any specific waste treatment and disposal method</p> <p>25 depend on the characteristics of the wastewater being</p>

1 disposed of?
 2 A Yes.
 3 Q Would the economic feasibility, if you have
 4 an opinion, of any specific waste treatment and
 5 disposal method depend on the characteristics of the
 6 wastestream?
 7 A I really don't know the answer to that.
 8 Q Okay. In your opinion, does the degree of
 9 environmental protection afforded by various waste
 10 treatment and disposal methods depend on the
 11 characteristics of the wastestream being disposed of?
 12 A Yes.
 13 MS. COLLINS: Those are my questions.
 14 Pass the witness.
 15 JUDGE WALSTON: Thank you.
 16 MS. COLLINS: Thank you.
 17 JUDGE WALSTON: For the applicant?
 18 MR. RILEY: Yes, please.
 19 CROSS-EXAMINATION
 20 BY MR. RILEY:
 21 Q Morning, Doctor.
 22 A Good morning.
 23 Q My name is John Riley. I represent the
 24 applicant in this matter.
 25 Let's begin with some preliminaries just

1 to get a scope for our discussion this morning.
 2 Please tell me again the name of your
 3 business. Is it Nova Biologicals?
 4 A Nova Biologicals, yes.
 5 Q And what type of business is Nova
 6 Biologicals?
 7 A We're a testing laboratory.
 8 Q Do you have a set list of clients or
 9 customers? How would it be easy to refer to your
 10 current clients or customers? What would you prefer?
 11 A Our current clients and customers are public
 12 water systems. Those individuals, companies,
 13 municipalities that provide drinking water to the
 14 public are our customers.
 15 Q Only public water supplies or water systems?
 16 A No. We do private testing also.
 17 Q Do you have any customers in the Montgomery
 18 County area?
 19 A Yes.
 20 Q Can you tell me who they are?
 21 A No.
 22 Q Okay. Could you tell me any of them?
 23 A City of Conroe.
 24 Q So you've had a relationship with the city of
 25 Conroe prior to your engagement in this matter. Is

1 that correct?
 2 A Yes.
 3 Q How about the county government, Montgomery
 4 County? Have you been engaged by Montgomery County
 5 prior to your engagement for this particular purpose?
 6 A Yes.
 7 Q In what capacity?
 8 A As a testing laboratory.
 9 Q And what type of testing did you do for
 10 Montgomery County?
 11 A Drug abuse testing.
 12 Q I believe that's referenced in your prefiled
 13 testimony as part of your experience in chemical
 14 analysis of -- or chemical analysis, I believe --
 15 A Yes.
 16 Q -- in a criminal context for probationers.
 17 Is that correct?
 18 A That's correct.
 19 Q Are you under contract with Montgomery County
 20 in that regard presently?
 21 A No.
 22 Q The city of Conroe, what type of work do you
 23 do for the city of Conroe?
 24 A Laboratory testing.
 25 Q Regarding their public water supply system?

1 A Yes.
 2 Q Is that a -- are you under contract with the
 3 city of Conroe or is that on a spot basis?
 4 A We are not under contract.
 5 Q How often would you say you perform testing
 6 for the city of Conroe?
 7 A Routinely.
 8 Q In percentage terms, can you give me an
 9 estimate of the percentage of business for Nova
 10 Biologicals that comes from the city of Conroe?
 11 A Somebody do the math. What percentage is 50
 12 of 8,000.
 13 Q So a small percentage?
 14 A Small percentage.
 15 Q Let's go with that.
 16 A Right.
 17 Q By no means then is the city of Conroe your
 18 only or sole customer at Nova Biologicals?
 19 A No.
 20 Q All right. Is there a geographic area that I
 21 could at least use to bound the public water systems
 22 that are your customers? Could you give me an
 23 estimate of that?
 24 A We bring in samples from 38 different states.
 25 Q Thirty-eight different states?

1 A Yes.

2 Q How large is your employee staff?

3 A Thirteen.

4 Q Based on your prefiled testimony, it appears

5 that you have a very in-depth understanding of

6 drinking water standards and EPA standards pertaining

7 to drinking water. Is that fair?

8 A Yes, that's fair.

9 Q I was intrigued by your reference to MCL, or

10 maximum contaminant level. What does that mean in lay

11 terms?

12 A The U. S. Environmental Protection Agency has

13 a list of what they call MCLs, maximum contaminant

14 levels, that drinking water cannot exceed. And these

15 chemicals -- constituents -- contaminants of --

16 contaminated constituents of drinking water are

17 classified by certain levels. So, for example, pick

18 one; lead. There is an MCL or maximum contaminant

19 level that can exist in drinking water and the

20 drinking water still be legal.

21 If it exceeds that level, then it

22 exceeds the maximum contaminant level, and it is in

23 violation.

24 Q So let me see if I understand. You can

25 actually have lead in drinking water and that would

1 still be considered acceptable for protection of human

2 health and the environment?

3 A I don't believe you can make that statement,

4 no.

5 Q Well, at least by EPA standards, it's

6 considered protective of human health and the

7 environment if you have lead but it's below the

8 maximum contaminant level?

9 A By EPA standards, yes.

10 Q You disagree with EPA's evaluation of the

11 protection of human health and environment and the

12 levels they've set for drinking water?

13 A By constituent; yes, I do disagree.

14 Q So you feel as though EPA has been -- I guess

15 is acting in a way that is not protective of human

16 health and the environment?

17 A No, I would not agree with that.

18 Q Well, I'm trying to flesh this out. There

19 are maximum contaminant levels that EPA says if you go

20 over those maximum contaminant levels, then the

21 drinking water -- or the water is not safe for

22 drinking. Is that correct.

23 A That's correct.

24 Q I thought I asked you whether the MCLs are

25 protective of human health and the environment, at

1 least as it pertains to EPA's evaluation.

2 A Put that in another question.

3 Q I'll try. EPA doesn't -- I mean, it uses

4 some form of evaluation, some method of evaluation to

5 set these maximum contaminant levels. Are you

6 familiar with that?

7 A Yes.

8 Q What do they do -- what does EPA do to set

9 these MCLs?

10 A They assess the human health effects of

11 various potential contaminants in the groundwater or

12 in the drinking water.

13 Q So presumably then, they would not set an MCL

14 at a level that was not protective of human health.

15 Is that correct?

16 A They have in the past.

17 Q They have?

18 A Yes.

19 Q In the past?

20 A Yes.

21 Q But is their goal to set levels for maximum

22 contaminants above levels that are protective of human

23 health?

24 A No, I don't think their goal is that, no.

25 Q You're saying that they have revised these

1 standards over time and have reset them lower. Is

2 that a correct characterization?

3 A Yes, they have reset them, yes.

4 Q Now, as they're presently set -- because you

5 give a good amount of testimony about MCLs in your

6 prefiled. As they are currently set, you do agree

7 with EPA's evaluation of maximum contaminant levels

8 and protectiveness of human health?

9 A You would have to go through that list with

10 me and ask my opinion about each of those

11 constituents. To lump everything in the

12 classification of contaminants that have MCLs is not

13 justified.

14 Q Okay. But EPA lumps them that way. They

15 give you a list of contaminants and a list of MCLs,

16 tell you that your drinking water is over these MCLs,

17 that EPA does not consider it protective of human

18 health. Correct?

19 A No, I don't think that's a fair statement.

20 Q How do you interpret that?

21 A I believe that each of the constituents that

22 they list has an MCL, and to say that if it exceeds

23 all the MCLs in the EPA's listing, that's an

24 inaccurate statement. You have to go constituent by

25 constituent.

1 Q I'm maybe confusing -- or at least what I was
2 trying to say is if you had a constituent in a
3 groundwater -- or excuse me -- drinking water sample
4 and it was under the MCL as set by the United States
5 Environmental Protection Agency, would you consider
6 that drinking water to be protective of human health?

7 A Yes.

8 Q So if I went down that list constituent by
9 constituent and asked you the same question for each
10 constituent, would your answer be the same?

11 A No, because they are -- EPA is constantly
12 revising the MCLs --

13 Q Okay. So --

14 A -- and that is a process that's ongoing now.

15 Q But you have to stop somewhere, would you
16 agree with me, Doctor? If we're evaluating drinking
17 water today when a sample is sent to your lab, let's
18 say, and there's a contaminant detected by your lab
19 that is below an MCL, do you tell your customer,
20 "Sorry. It's under revision. These are constantly
21 being reviewed by EPA; therefore, this is not
22 protective of human health"?

23 A I tell them the first part. I don't tell
24 them that it's not protective of human health. I tell
25 them that these are under revision.

1 Q Which particular MCLs, which particular
2 constituents are under revision presently that you
3 could not tell your customers that drinking water is
4 safe?

5 A I couldn't answer that.

6 Q You've been described as -- these aren't your
7 words but -- Mr. Walker, I don't want to pick on you
8 either -- but as Mr. Wizard on steroids as it comes to
9 drinking water evaluation.

10 A Okay.

11 Q And I'll just accept that because you
12 certainly have the qualifications from the
13 description.

14 Can you tell me any constituents that
15 you would say right now presently, today, you don't
16 feel the MCL set by the United States Environmental
17 Protection Agency is protective of human health?

18 A No, because I don't know which ones are under
19 revision at this point -- all of the ones that are
20 under revision at this point.

21 Q So these performance enhancing -- I'll stop.
22 I'll just go on to the next question.

23 JUDGE WALSTON: You didn't play
24 baseball, did you?

25 (Laughter)

1 A George is on the phone now.

2 Q (By Mr. Riley) Let's agree, Doctor, then at
3 least as it pertains to whether a drinking water
4 system is meeting EPA standards that presently you
5 work by a static list, not a dynamic picture. So you
6 have to look at the list and determine whether the
7 drinking water sample meets current standards, even if
8 they're being considered for revision. Correct?

9 A That's a fair statement, yes.

10 Q Now, I've implied from the use of the word
11 "maximum" contaminant level that there is a
12 contaminant level that would be acceptable in drinking
13 water as long as it doesn't exceed maximum level.

14 A From a regulatory standpoint, that's true,
15 yes.

16 Q Do you have an opinion that water should be
17 pure H₂O? I want to get that out so we can move on,
18 but is it your professional scientific expert opinion
19 that no contaminant is safe in drinking water?

20 A No, I don't agree with that, no.

21 Q Is there any particular contaminant that
22 you're concerned with that you think, "That
23 contaminant, I just don't agree, that there should be
24 any part, no matter what concentration in drinking
25 water sample that is protective"?

1 A I think any chemical that we deliberately put
2 in the drinking water supply should not be there.

3 Q Okay. What is a drinking water supply?

4 A A drinking water supply typically is
5 categorized by two -- or has two categories;
6 groundwater, which would be rivers, lakes and streams.

7 Q I'm sorry.

8 A I mean, groundwater would be well water, and
9 then surface water would be rivers, lakes and streams.

10 Q Do you do any work for any customer that
11 involves sampling of discharged water or water that
12 goes into, from a -- let's say a publicly owned
13 treatment works into a surface water body, say,
14 upstream of a drinking water source?

15 A No.

16 Q So do you have any knowledge of the
17 contaminant levels that might be allowed, say, from
18 the city of Conroe publicly owned treatment works?

19 A I do know that there are allowable limits in
20 the wastewater stream coming out of wastewater
21 treatment plants, yes.

22 Q But you don't have experience or expertise in
23 how those levels are set for analysis of those
24 discharge waters?

25 A No, not on the wastewater side.

<p style="text-align: right;">Page 715</p> <p>1 Q Would you expect the chemistry to be the</p> <p>2 same, though, that if the same tests that you run to</p> <p>3 test for constituents in drinking water would likely</p> <p>4 be the same or similar tests run to test for</p> <p>5 constituents in discharge from treatment plants?</p> <p>6 A No.</p> <p>7 Q You would not?</p> <p>8 A No.</p> <p>9 Q Why is that?</p> <p>10 A A wastewater stream is different than a</p> <p>11 drinking water stream.</p> <p>12 Q I understand that, but the constituents of</p> <p>13 concern might be the same. Correct?</p> <p>14 A Might be, yes.</p> <p>15 Q Is it -- am I correct then, Doctor, that if I</p> <p>16 asked you a bunch of questions about how wastewater</p> <p>17 treatment plant effluent is evaluated that you're not</p> <p>18 going to be able to answer me?</p> <p>19 A I can answer some of that, yes.</p> <p>20 Q Well, let's just press on and see how we do.</p> <p>21 Are you familiar or do you have any knowledge of any</p> <p>22 upstream discharge from a publicly owned treatment</p> <p>23 plant into a drinking -- a surface water drinking</p> <p>24 source?</p> <p>25 A No.</p>	<p style="text-align: right;">Page 717</p> <p>1 surface water body that is a public drinking water</p> <p>2 source?</p> <p>3 A No.</p> <p>4 Q So the answer is there would likely be -- I'm</p> <p>5 sorry. You answered it correctly, but let me just</p> <p>6 elaborate a little further.</p> <p>7 The answer is that chemical constituents</p> <p>8 would likely persist through the treatment works and</p> <p>9 into a drinking water source. Is that correct?</p> <p>10 A That is correct.</p> <p>11 Q Do you know -- let me use the city of Conroe</p> <p>12 as an example since we're --</p> <p>13 JUDGE WALSTON: Mr. Riley, just to make</p> <p>14 sure I understand what you're asking him, are you</p> <p>15 talking about the wastewater stream that's going to be</p> <p>16 put in injection wells or just wastewater streams in</p> <p>17 general?</p> <p>18 MR. RILEY: I was asking a hypothetical</p> <p>19 of wastewater streams in general going to a POTW. Let</p> <p>20 me clarify a little bit further.</p> <p>21 Q (By Mr. Riley) What I thought I asked, and I</p> <p>22 think maybe the Doctor and I were on the same</p> <p>23 wavelength, maybe not.</p> <p>24 Let's take a hypothetical truckload of</p> <p>25 Class I non-hazardous industrial wastewater, and let's</p>
<p style="text-align: right;">Page 716</p> <p>1 Q Do you imagine that occurs?</p> <p>2 A Yes.</p> <p>3 Q And with the concerns regarding availability</p> <p>4 of water, both surface and groundwater in Texas, would</p> <p>5 you agree with me that water is used and reused and</p> <p>6 someone's drinking water may have been someone's</p> <p>7 wastewater just a short while earlier?</p> <p>8 A Yes, I agree with that.</p> <p>9 Q Would you agree with me then, in terms of</p> <p>10 chemical constituents and wastewater streams, that</p> <p>11 reducing chemical constituents or eliminating chemical</p> <p>12 constituents from wastewater streams is preferable to</p> <p>13 allowing even small concentrations into a drinking</p> <p>14 water source?</p> <p>15 A I would agree with that, yes.</p> <p>16 Q So let me pose a hypothetical to you. If</p> <p>17 I -- regardless of whether folks in this room agree to</p> <p>18 the protectiveness of TexCom's proposal, let me just</p> <p>19 ask you as it pertains to surface water, if</p> <p>20 wastestreams, such as the Class I non-hazardous</p> <p>21 industrial wastewaters that are the subject of this</p> <p>22 discussion were to go to a publicly owned treatment</p> <p>23 works, would you expect, based on your understanding</p> <p>24 of water treatment, that all chemical constituents</p> <p>25 could be removed before being discharged into a</p>	<p style="text-align: right;">Page 718</p> <p>1 take that hypothetical truck to the city of Conroe</p> <p>2 publicly owned treatment works, their wastewater</p> <p>3 treatment facility, assuming proper permits and proper</p> <p>4 fees are paid to the city of Conroe and it's allowed</p> <p>5 to be discharged into a publicly owned treatment</p> <p>6 works, would you expect the chemical constituents in</p> <p>7 the wastewater brought by the hypothetical truck would</p> <p>8 be eliminated by the wastewater treatment plant before</p> <p>9 being discharged into the surface water of the state</p> <p>10 of Texas?</p> <p>11 A Probably not.</p> <p>12 Q And what particular chemicals would you be</p> <p>13 concerned with as to whether they were received by a</p> <p>14 publicly owned treatment works could not be removed by</p> <p>15 your understanding of what treatment works currently</p> <p>16 exist?</p> <p>17 A That's very difficult to answer. There are</p> <p>18 so many potential contaminants, and whether or not</p> <p>19 they can be removed by the wastewater treatment plant</p> <p>20 is virtually impossible to answer, not knowing what</p> <p>21 the mix is going in initially.</p> <p>22 Q Well, you've expressed a number of concerns</p> <p>23 in your prefiled testimony about certain chemical</p> <p>24 constituents, ethylene glycol, benzene, toluene, and I</p> <p>25 won't try to numerate them all off the top of my head,</p>

<p style="text-align: right;">Page 719</p> <p>1 but let's talk about those, those chemical 2 constituents and your knowledge of wastewater 3 treatment plants and the ability to remove chemical 4 constituents under conventional or existing 5 technology. 6 Would you expect those constituents to 7 be removed in a publicly owned treatment works? 8 A Yes, the volatile hydrocarbons you would 9 expect to be removed in a wastewater treatment plant. 10 Q And is that because they would evaporate? 11 A Yes. 12 Q So they're not treated. They're released 13 into the air. Correct? 14 A The wastewater stream is treated. 15 Q And it's aerated, and that causes the 16 volatile organics to float off. Correct? 17 A Yes. 18 Q And that's the -- so those volatile organic 19 compounds are released into the air around Conroe as 20 part of this process. Would that be correct? 21 A Yes. 22 Q And do you have any knowledge of the 23 attainment or nonattainment status of the area of 24 Montgomery County? 25 A I do not.</p>	<p style="text-align: right;">Page 721</p> <p>1 probably don't know the air chemistry for the 2 formation of ozone, do you? 3 A No. 4 Q Do you know if volatile organic compounds 5 play any role in the formation of ozone? 6 A Yes. 7 Q They do? 8 A Yes. 9 Q So at least as it pertains to this line of 10 questioning, release of volatile organic compounds 11 into a nonattainment area seems unwise. Would you 12 agree? 13 A Yes. 14 Q Are there any list of chemicals that you've 15 drawn down on in the prefiled testimony that are not 16 volatile organic compounds? 17 A Yes. 18 Q And which one would you like to focus on? 19 I'll just use it as an example. 20 A Let's take the metals. 21 Q Metals, okay. 22 A Lead, mercury, cadmium. 23 Q Elemental metals? 24 A Elemental metals, yes. 25 Q Let's take arsenic. How is that?</p>
<p style="text-align: right;">Page 720</p> <p>1 Q It was introduced earlier in the proceedings 2 that Montgomery County is in a nonattainment air 3 quality region. 4 MR. WALKER: Your Honor, I object to 5 that question. He's said he doesn't know anything 6 about it. 7 JUDGE WALSTON: Right. 8 MR. WALKER: Now he's testifying. 9 MR. RILEY: We can pull out the exhibit 10 because it was actually the Federal Register that was 11 introduced into detailing the county, but I thought 12 this would be more efficient. 13 JUDGE WALSTON: Go ahead and reask 14 your -- let him finish his question, and we'll see 15 what it -- and if you can answer it, you can. If you 16 don't know, just say you don't know. 17 Q (By Mr. Riley) Somewhere in these hundreds 18 of exhibits, probably at this point, there is a 19 Federal Register notice -- and I don't remember the 20 date -- that indicates that Montgomery County is in 21 nonattainment status for ozone. Are you aware of 22 that? 23 A No. 24 Q I'm going to guess even with your vast 25 knowledge of chemistry and your background that you</p>	<p style="text-align: right;">Page 722</p> <p>1 A Okay. 2 Q Is arsenic removed from a wastewater stream 3 in a publicly owned treatment works? 4 A To a degree. 5 Q And -- okay. By "removed," I'm going to go 6 with is it removed 100 percent? 7 A No. 8 Q Okay. Can you give an estimate of the 9 percentage of removal of arsenic, say, from a 10 wastewater stream going through a publicly owned 11 treatment facility? 12 A No. 13 Q Is it fair to say that there is some 14 percentage, though, that remains in the water and 15 would be discharged in the hypothetical I started a 16 few moments ago, into surface water body? 17 A Depends on the wastewater treatment plant. 18 Q And I'm just using arsenic as an example, but 19 am I going to -- am I correct that -- let me go a 20 different direction for just a second. We were 21 talking about volatile organic compounds a moment ago. 22 Are there different levels of volatility pertaining to 23 those compounds? 24 A Yes. 25 Q And is there, in your experience or</p>

1 estimation -- I'm not sure if you have experience with
2 wastewater treatment plants, but the amount of removal
3 of those volatile organic compounds might be different
4 for different volatiles. Is that fair to say?

5 A Yes.

6 Q That's because as you aerate water and some
7 volatile organic compounds are released to the air,
8 some that are less volatile might remain, and as the
9 process cycles, you're going to remove a good amount
10 perhaps but not all volatile organic compounds.

11 Correct?

12 A Yes.

13 Q And that, to a large degree, has to do with
14 how long the water is exposed to the aeration system
15 or whatever other mechanism before it's discharged.

16 Correct?

17 A Yes.

18 Q In this case, you talk about a reverse
19 osmosis process. Could you describe more fully what a
20 reverse osmosis process is?

21 A A reverse osmosis process is mechanical
22 mechanism for purifying water. It involves --

23 Q And it -- I'm sorry.

24 A It involves a semipermeable membrane under
25 pressure.

1 Q Effectively it is -- at least from high
2 school biology and then a little bit in college -- it
3 is forcing water across the membrane that is
4 impenetrable to other types of molecules or
5 components. Is that correct?

6 A That is correct.

7 Q So it requires energy to force the water
8 across the membrane. On the other side of the
9 membrane is where the purified water comes out, and
10 whatever was held back by the membrane is where that
11 material resides. Correct?

12 A That's correct.

13 Q What happens to that side of reverse osmosis?
14 By "that side," I mean the side where the chemical
15 constituents remain. Do you know what happens? Have
16 you ever worked with a reverse osmosis unit?

17 A It becomes part of the wastewater stream.

18 Q And where does that go?

19 A Wastewater treatment plant.

20 Q Or to some other method of wastewater
21 disposal. Correct?

22 A Yes.

23 Q So if we -- for purposes of this discussion,
24 if I were trying to purify water, say, out of the San
25 Jacinto, would it make any sense for me to pull the

1 water out or -- through a reverse osmosis unit, take
2 the same discharge water -- excuse me -- the water
3 that would be discharged through a POTW and put it
4 back into the San Jacinto only to pull it out again
5 and put it through the reverse osmosis process?

6 A Would depend on your use of the RO water.

7 Q RO water is generally a higher quality, much
8 more pure than a conventional drinking water treatment
9 system. Correct?

10 A That's correct.

11 Q The compounds that you discuss and are
12 concerned with in the TexCom application, those are --
13 some of those constituents are particularly difficult
14 to remove from water and could not be removed as your
15 testimony lays out, in a conventional or typical
16 public drinking water system. Correct?

17 A Yes, that's fair.

18 Q That's where you say that in order -- if
19 these chemical constituents got into drinking water,
20 then one would have to, perhaps install an RO unit,
21 and that would be very expensive?

22 A Yes.

23 Q So many of the chemical constituents that you
24 lay out in your prefiled testimony you would not want
25 to see in a surface drinking water source. Correct?

1 A That's correct, yes.

2 Q Or in fairness, in an underground drinking
3 water source either. Correct?

4 A Right. You would want an alternative way to
5 dispose of it.

6 Q So the parallel I'm drawing is that if there
7 are Class I wastewaters that go to publicly owned
8 treatment works, and if indeed some chemical
9 constituents remain in that wastewater and are
10 discharged into surface water, then that's one
11 possible way of, I suppose, leading to contamination
12 of drinking water sources. Would you agree?

13 A Yes.

14 Q And another possible way might be -- again,
15 possibilities -- not probabilities or likelihoods --
16 but possibilities would be to inject that same water
17 into subsurface strata, and if it came in contact with
18 the drinking water source, then that could also lead
19 to the dispersion of those chemical constituents as
20 you described in your testimony?

21 A Yes.

22 Q But as between the two, which would guarantee
23 to introduce chemicals constituents into drinking
24 water?

25 A Neither one is guaranteed.

1 Q All right. Let's talk about the POTW one
2 more time. If I have a POTW upstream of a drinking
3 water source, and the POTW cannot remove all chemical
4 constituents from a Class I non-hazardous industrial
5 wastestream, aren't some chemical constituents going
6 to go into the drinking water source?

7 A Are we making the assumption they cannot
8 remove everything?

9 Q Well, I thought you said that, but I want to
10 be clear on it; that the POTW -- or excuse me -- the
11 POTW does not, under conventional technology, remove
12 all chemical constituents that you've elaborated on in
13 your testimony before it discharges into surface
14 waters.

15 A Yes, that's true.

16 Q So we're there together at this point, that
17 chemical constituents persist throughout a publicly
18 owned treatment works, through the treatment works,
19 into a surface water body, and then in my
20 hypothetical, upstream of a drinking water source,
21 presumably, Doctor, you would agree that those
22 chemical constituents are now in a drinking water
23 source?

24 A Yes.

25 Q That's a guarantee. Correct?

1 A Well, I take exception with the designation
2 of a "guarantee." That are no guarantees, but, okay;
3 I would agree that they could be in the drinking
4 water -- or in the drinking water source.

5 Q Okay. Now, again, regardless of whether
6 you -- you're not a geologist, I assume.

7 A No.

8 Q Not a hydrogeologist?

9 A No.

10 Q We've had several. I just want to be clear.
11 Do you know, or has anyone explained to you, or have
12 you reviewed any materials as to where TexCom proposes
13 to inject the Class I non-hazardous industrial
14 wastewater?

15 A No.

16 Q So are you under the impression that it's
17 being injected into a drinking water source?

18 A No.

19 Q What is your impression?

20 A My impression is it's being injected into an
21 abandoned oil well.

22 Q An abandoned oil well?

23 A Yes.

24 Q And how did you gain that impression?

25 A Primarily from the fact that the well site is

1 in an abandoned oil field.

2 Q Okay. And that's fair. It's an assumption
3 you may have made, but if it's not an abandoned oil
4 well but in fact a new well that is designed for waste
5 disposal, does that change your concerns in any way?

6 A No.

7 Q How far below the underground drinking water
8 source is the TexCom plan for injection?

9 A I don't know.

10 Q Does that have any influence on your opinion
11 as to whether the TexCom project is in the public
12 interest or not?

13 A No.

14 Q So no matter how far below, no matter what
15 layers are between the injection interval and the
16 drinking water source, your opinion would not change
17 as to whether this disposal well is in the public
18 interest?

19 A That's correct.

20 Q Why is that, Doctor?

21 A You're going through an aquifer with
22 hazardous chemicals. You're deliberately drilling a
23 hole with a casing through an aquifer at 1,500 feet,
24 say, and however deep this well goes, that injection
25 stream is exposed to a drinking water source.

1 Q In the casing?

2 A Uh-huh.

3 Q So if I understand your testimony correctly,
4 it would concern you greatly to know, let's say for
5 instance, the current operator of the Conroe field
6 injects Class II -- into Class II wells a material
7 that is not even tested for its chemical constituents
8 before it is delivered into the Vicksburg or Frio
9 stratum?

10 A You just left my pay grade.

11 Q Okay. Sorry. You weren't here for the whole
12 case, but there's been some discussion about the
13 Conroe oil field and the age of the Conroe oil field
14 and the fact that the current operator maintains some
15 53 or 54 what's referred to as Class II disposal
16 wells. I think everybody else will agree there's been
17 some discussion about it.

18 Are you familiar with Class II disposal
19 wells?

20 A No.

21 Q Do you have any knowledge of the types of
22 chemicals or constituents that can be disposed of in a
23 Class II disposal well?

24 A No.

25 Q Do you have any familiarity with the

<p style="text-align: right;">Page 731</p> <p>1 regulatory process for permitting a Class II disposal 2 well? 3 A No. 4 Q If it were so, that a Class II disposal well 5 could inject what is, except for a legal exception, a 6 hazardous waste into a Class II well in the Conroe 7 field, would that concern you? 8 A Yes. 9 Q In what way, Doctor? 10 A Why would you want to do that? What is the 11 reason behind taking the risk of putting toxic 12 material down a hole that runs through an aquifer? 13 Q So it doesn't matter; for your purposes, no 14 waste disposal should occur underground? 15 A Why would you do that? 16 Q I'm asking you a question, sir. 17 A Right. I agree. 18 Q So there should be absolutely no waste 19 disposal underground? 20 A Through an injection well that goes through 21 an aquifer. 22 Q Okay. Do you know any part of the state of 23 Texas that does not contain an aquifer at some depth? 24 A No. 25 Q So the entirety of the state should be</p>	<p style="text-align: right;">Page 733</p> <p>1 A Yes. 2 Q What is that called? 3 A MDL. 4 Q Is that minimum detection limit? 5 A Yes. 6 Q Does that vary by constituent? 7 A Yes. 8 Q And is it dependent on the technical 9 capability of your lab, or any other lab for that 10 matter, on -- and the science of detecting low 11 concentrations of chemical constituents? 12 A Yes. 13 Q Am I correct then, Doctor, that your lab is 14 capable of detecting chemical constituents at levels 15 that are below maximum contaminant levels? 16 A Yes. 17 Q So that the gap, if I use my hands -- you 18 have your minimum detection limit, which means you 19 have to have at least concentration of a chemical 20 constituent in order to identify it with current 21 technical capability. Correct? 22 A Yes. 23 Q And then above that, you would have a maximum 24 concentration level that EPA considers protective of 25 human health. Correct?</p>
<p style="text-align: right;">Page 732</p> <p>1 excluded from this process. Is that correct? 2 A Yes. 3 Q Do you know any parts of Louisiana that are 4 not under -- over an aquifer? 5 A I do not. 6 Q So I don't want to be unfair. Does that mean 7 that you understand that all of Louisiana is over an 8 aquifer of some sort? 9 A I can't address that. 10 Q But in Texas, you're at least familiar with 11 some of the aquifers? 12 A Yes. 13 Q Particularly along the Gulf Coast, do you 14 know the names of the aquifers below the surface? 15 A Some of them, yes. 16 Q So in your testimony then, even if it were 17 true from a scientific or geologic perspective that 18 wastes could be injected and would stay in a stratum 19 that could not be used for drinking water, you would 20 not think that's a wise thing to do? 21 A That's correct. 22 Q I need to go back a little bit. You talked 23 about MCLs. Is there another term that would 24 determine the technological capability of a lab such 25 as yours to detect a chemical constituent?</p>	<p style="text-align: right;">Page 734</p> <p>1 A Contaminant level, yes. 2 Q Thank you. So you could detect a chemical 3 constituent, and it still would be considered, under 4 those circumstances, as long as it's below the maximum 5 contaminant level, protective of human health? 6 A Yes. 7 Q I have a couple more questions. 8 A By constituent. I'll go back to my original 9 testimony. 10 Q Yes. Subject to the discussion we had when 11 we kicked off our examination? 12 A Yes. 13 Q Do you use antifreeze in your car, Doctor? 14 A Yes. 15 Q Have you ever spilled any on your driveway? 16 A Yes. 17 Q Did you remove that piece of driveway and 18 take it to a landfill for hazardous waste? 19 A No. 20 Q What did you do? 21 A I contained it, cleaned it up. 22 Q Where did you put it? 23 A In a protected landfill. 24 Q Protected landfill. That's what I want to 25 talk about next. Are you familiar with landfills?</p>

<p style="text-align: right;">Page 735</p> <p>1 A No.</p> <p>2 Q Do you know anything about waste disposal in</p> <p>3 landfills?</p> <p>4 A No.</p> <p>5 Q Do you consider landfills protective of human</p> <p>6 health and the environment?</p> <p>7 A I think some of them are, yes.</p> <p>8 Q Can you name the ones that you think are</p> <p>9 protective of human health and the environment?</p> <p>10 A No.</p> <p>11 Q I'm sorry?</p> <p>12 A No.</p> <p>13 Q Why your qualification of "some"?</p> <p>14 A Because I realize some of them are</p> <p>15 constructed more rigorously than others.</p> <p>16 Q You have some basic knowledge of landfills</p> <p>17 without getting more detailed into how landfills</p> <p>18 protect the material they receive from entering or</p> <p>19 re-entering the environment. Is that fair?</p> <p>20 A Yes, that's fair.</p> <p>21 Q Generally speaking then, what is your</p> <p>22 understanding of -- how a landfill might be better</p> <p>23 constructed than another?</p> <p>24 A My understanding is a well-constructed</p> <p>25 landfill that's been permitted to receive certain</p>	<p style="text-align: right;">Page 737</p> <p>1 A I have some appreciation for them, yeah.</p> <p>2 Q Again, could you explain that?</p> <p>3 A My level of appreciation is that it's an</p> <p>4 engineered solution to a potential problem.</p> <p>5 Q I assume, Doctor, since you mentioned</p> <p>6 throwing away the cleanup of your driveway spill in</p> <p>7 your trash can that you have waste, or you generate</p> <p>8 waste at your home. Is that correct?</p> <p>9 A That's correct.</p> <p>10 Q As far as you know, does that go to a</p> <p>11 permitted municipal solid waste landfill?</p> <p>12 A As far as I know, yes.</p> <p>13 Q I'm sorry. Do you live in Montgomery County,</p> <p>14 by the way?</p> <p>15 A Yes.</p> <p>16 Q Do you live in Conroe?</p> <p>17 A Yes.</p> <p>18 Q Back to the liner system we were discussing,</p> <p>19 would you expect the liner for a municipal solid waste</p> <p>20 landfill site to be 1,000 feet of protective geologic</p> <p>21 strata?</p> <p>22 A Would I expect the liner?</p> <p>23 Q Yes, sir.</p> <p>24 A No.</p> <p>25 Q So you would expect it to be substantially</p>
<p style="text-align: right;">Page 736</p> <p>1 hazardous chemicals is -- it has certain types of soil</p> <p>2 as the grade, and then it's covered with -- or lined</p> <p>3 with certain types of impermeable membranes.</p> <p>4 Q You hit on a key term, and I want to discuss</p> <p>5 that. The impermeable membrane in a landfill, do you</p> <p>6 understand what it would function to do?</p> <p>7 A I believe I do, yes.</p> <p>8 Q Okay. Could you explain that to us?</p> <p>9 A It would prevent the introduction of any</p> <p>10 hazardous material that was laid in that landfill from</p> <p>11 penetrating into the subsurface soil.</p> <p>12 Q All right. So let's go again with another</p> <p>13 hypothetical. Let's say you and I enter into a</p> <p>14 business and we decide to develop a landfill, and we</p> <p>15 follow all the regulations and we develop a landfill</p> <p>16 liner system that, as you said, would -- is designed</p> <p>17 to protect the landfill material from leaching into</p> <p>18 normal or natural soils. Is that right so far?</p> <p>19 A So far.</p> <p>20 Q I'm not making a proposal, by the way. I</p> <p>21 just want to build a hypothetical.</p> <p>22 And do you have any appreciation for --</p> <p>23 you said a barrier layer or liner system, something</p> <p>24 along those lines. Do you have any appreciation for</p> <p>25 the design of a barrier layer or landfill liner?</p>	<p style="text-align: right;">Page 738</p> <p>1 less than 1,000 feet thick. Is that correct?</p> <p>2 A I would expect it to be impermeable --</p> <p>3 demonstrably impermeable and prevent the introduction</p> <p>4 of hazardous waste.</p> <p>5 Q Do you know what household hazardous waste</p> <p>6 is, Doctor?</p> <p>7 A No.</p> <p>8 Q Do you expect you have any at home?</p> <p>9 A Don't know what it is.</p> <p>10 Q Fair enough. Do you have any products that</p> <p>11 contain -- do you have a carton of -- gallon of</p> <p>12 antifreeze in your garage?</p> <p>13 A No.</p> <p>14 Q Back to my story. The reason I'm developing</p> <p>15 this is you say that this project is not in the public</p> <p>16 interest, and we've explored at least some part of</p> <p>17 your position in that regard, and I wanted to</p> <p>18 understand if you think that -- and I'm going to stop</p> <p>19 being flippant about it.</p> <p>20 Would you agree with me that wastes are</p> <p>21 generated in our culture or society and that waste</p> <p>22 volume is substantial?</p> <p>23 A Yes.</p> <p>24 Q Would you agree with me that since you've</p> <p>25 pretty well precluded the possibility in your</p>

1 estimation of injecting any of that waste in the state
2 of Texas into or below the ground that you're limited
3 to surface disposal opportunities. Correct?

4 A I think there's some alternatives besides
5 that.

6 Q Would you tell me what those are?

7 A No. I just think there are some
8 alternatives, other than just putting it on the
9 ground.

10 Q Other than a rocket launcher, do you have
11 anything specifically that you could tell me would
12 be -- would be currently available as between
13 injecting it or disposing of it on the surface of the
14 ground?

15 A Well, how about concentrating it and burning
16 it?

17 Q Incineration?

18 A As a consideration.

19 Q Okay. Incineration then is one other option.
20 Again, I know you're not an expert in air quality, but
21 certainly living in the Conroe area you've probably
22 heard about air quality issues in Houston, Texas. Is
23 that correct?

24 A Right.

25 Q And do you think burning is a good idea in

1 the Houston, Texas area?

2 A What are the off-gases that come out of that
3 burning process?

4 Q You tell me. What happens when you burn
5 benzene?

6 A Depends on the circumstances under which you
7 burn it.

8 Q Do you think carbon dioxide is one of them?

9 A Sure.

10 Q Think that's a good idea?

11 A Depends on the volumes.

12 Q Well, okay. So certainly your answer, in
13 terms of what other options there are for disposal of
14 wastes, so far we've covered landfills, briefly,
15 wastewater treatment plants and incineration. Can you
16 think of any others?

17 A No.

18 Q Again, just assume with me, if you would,
19 that incineration of a volume of material is
20 associated with air emissions. Do you think that's
21 right?

22 A That's fair, yes.

23 Q Regardless of volume, do you have any
24 appreciation for the struggles of the Houston area to
25 come into what's referred to as attainment?

1 A I'm aware that they are working and
2 struggling with that, but I don't have any idea about
3 what the degree of struggle is.

4 Q Would you agree, regardless of the degree of
5 struggle, that adding any new air emissions, when
6 there's a struggle to achieve present air quality
7 standards, would be unwise?

8 A Rephrase that, please.

9 Q Sure. Every day the city of Houston and this
10 area, this community, struggles with federal
11 regulations that impose certain types of restrictions
12 on activity in nonattainment areas. Are you familiar
13 generally with that phenomenon?

14 A Yes.

15 Q So presently this area, the area we sit in,
16 is in nonattainment for air quality standards. Do you
17 understand that?

18 A Yes.

19 Q Now, regardless of your knowledge of what
20 byproducts there might be or emissions there might be
21 from incineration of waste, would you think it's good
22 idea or in the public interest to incinerate waste in
23 Montgomery County?

24 A No.

25 Q So can we cross incineration off the list of

1 good ideas that are in the public interest?

2 A I would want to look at the other
3 alternatives in terms of where you do it, when you do
4 it -- of that process. Just because we say it can't
5 be done in Montgomery County doesn't mean that you
6 just strike it off the list automatically.

7 Q So you would ship it out to some other county
8 and affect the quality of the air in that other county
9 to solve Montgomery County's problem?

10 A Not necessarily. Not necessarily.

11 Q I thought you just said it depends on where
12 you send it. Let's talk about Montgomery County.
13 Let's draw an imaginary boundary around this county
14 and say, "Every county ought to handle its own waste.
15 Whatever waste it generates, it ought to dispose of it
16 in the county." Okay? Are we on the same wavelength?

17 A Just the waste that's generated in Montgomery
18 County?

19 Q Just the waste that's generated in Montgomery
20 County. You generate waste at your home. Correct?

21 A Uh-huh.

22 Q Do you know where it goes?

23 A Right.

24 Q Do you know where it goes?

25 A No, not totally.

<p style="text-align: right;">Page 743</p> <p>1 Q Do you know if it's disposed of in Montgomery 2 County? 3 A No, I don't. 4 Q I assume -- are you on a septic system or do 5 you discharge into the publicly owned treatment works? 6 A Public. 7 Q And which -- it's the city of Conroe POTW? 8 A Yes. 9 Q And assuming, again, these are limits. We've 10 defined the options. There's landfilling, there's 11 incineration and there's wastewater treatment. Right 12 so far? 13 A Those are the three we've talked about, yes. 14 Q And I'm asking you -- again, I want to 15 complete whether -- are there any others you can think 16 of? 17 A I'm not an expert in that area, so I can't 18 really answer that. 19 Q But you're an expert in public interest 20 because you've testified about what's in the public 21 interest. So I want to understand the bounds of your 22 answer. 23 Do you have any other solution for the 24 waste disposal needs of the citizens of Montgomery 25 County?</p>	<p style="text-align: right;">Page 745</p> <p>1 Q Is it all CO2? 2 A What's the incineration mechanism? 3 Q Well, let's talk about CO2. Is injecting CO2 4 a good idea? 5 A I don't know. 6 Q What chemical consequences might there be to 7 injection of CO2? 8 A I have no idea. 9 Q Do you know whether carbonic acid could form 10 below the surface with the injection of CO2? 11 A Could; sure. 12 Q Would carbonic acid have any effect on a 13 limestone formation? 14 A What does CO2 do when you inject it into the 15 substrata and you have a microbial population that 16 utilizes CO2 as a carbon source? 17 Q Don't you have more microbes then? 18 A What does that do? 19 Q I don't know. Do you know? 20 A Yeah. 21 Q What happens? 22 A It enhances the destruction of that CO2 as it 23 goes down the hole. 24 Q So now you have less CO2. Is carbonic acid 25 formed?</p>
<p style="text-align: right;">Page 744</p> <p>1 A No. 2 Q We've crossed incineration off on -- on that 3 hypothetical, we draw a boundary around the county and 4 we have at least discussed superficially the air 5 quality status of Montgomery County, and I think we've 6 agreed that incineration is just not a good idea. 7 A I think for today, yes; for today. 8 Q Again, I'm making my hypothetical -- 9 constructing it that every county is going to take 10 care of its own waste disposal needs. So we're not 11 talking about shipping it to some other place and 12 affecting air quality in some area that you might not 13 be concerned with, but probably those people are, that 14 Montgomery County -- we have this imaginary barrier 15 around it. It's going to take care of its own waste, 16 and I think we're in agreement now that incineration 17 is not a good idea. 18 A Are we assuming that the off-gases that come 19 out of an incineration mechanism is discharged into 20 the air? 21 Q Have you got another option? Do you want to 22 inject it in the ground? 23 A Why not? 24 Q I thought that was a bad idea. 25 A It's CO2, isn't it?</p>	<p style="text-align: right;">Page 746</p> <p>1 A Has it formed? 2 Q That's what I'm saying. Does carbonic acid 3 form? 4 A Carbonic acid could potentially form, yes. 5 Q How deep would these bacteria be that you've 6 been describing? 7 A Well, we know they go down -- many of the 8 gram-positive spore formers will be down at 10,000 9 12,000 feet. 10 Q So that's at least one option then. If only 11 CO2 were generated from incineration of waste, then at 12 least the CO2 in your discussion would be taken care 13 of. Correct? 14 A Right. 15 Q Is that your understanding of what happens in 16 incineration of, say, a plastic, that only CO2 is 17 generated? 18 A I don't know. 19 Q Do you think there's a reason that the TCEQ 20 has a lengthy permit process that evaluates all air 21 emissions from incineration and breaks it into its 22 constituents? 23 A Yes, I understand that. 24 Q You think CO2 is the only one they ever 25 concern themselves with?</p>

<p style="text-align: right;">Page 747</p> <p>1 A No.</p> <p>2 Q So are we back to talking about whether</p> <p>3 incineration is a good idea or not?</p> <p>4 JUDGE WALSTON: You need to ask him a</p> <p>5 question. Maybe that is a question, but I'm not sure</p> <p>6 what it is.</p> <p>7 MR. RILEY: I think I'll move on.</p> <p>8 Q (By Mr. Riley) Let's talk about landfills</p> <p>9 then. How many landfills are there in Montgomery</p> <p>10 County, if you know?</p> <p>11 A I don't know.</p> <p>12 Q Do not know?</p> <p>13 A I do not know.</p> <p>14 Q Do you know if Montgomery County -- the</p> <p>15 landfill in Montgomery County is -- what its expected</p> <p>16 life would be? Actually, you don't know of any</p> <p>17 landfills so I guess you can't answer that question.</p> <p>18 A That's correct.</p> <p>19 Q Do you know what the sources of the types of</p> <p>20 waters that TexCom is proposing are in Montgomery</p> <p>21 County?</p> <p>22 A I saw the listing of the various companies</p> <p>23 that materials would be coming from.</p> <p>24 Q There are some companies in Montgomery County</p> <p>25 that generate Class I non-hazardous industrial</p>	<p style="text-align: right;">Page 749</p> <p>1 Q With all those wastewaters being generated by</p> <p>2 those entities, would you say that it's a good idea to</p> <p>3 have adequate disposal opportunities and facilities</p> <p>4 for them?</p> <p>5 A Yes.</p> <p>6 Q Would you say that economic reasonableness</p> <p>7 factors in, that it should be economic for those</p> <p>8 businesses, in order to sustain themselves, that they</p> <p>9 have the ability to dispose of their waste in an</p> <p>10 economic fashion?</p> <p>11 A Yes.</p> <p>12 Q Are you familiar, Doctor, with the</p> <p>13 pretreatment ordinance for the city of Conroe for its</p> <p>14 publicly owned treatment works?</p> <p>15 A No.</p> <p>16 MR. RILEY: I'm going to have an exhibit</p> <p>17 marked to talk to the Doctor a minute about.</p> <p>18 (TexCom Exhibit No. 71 marked)</p> <p>19 JUDGE WALSTON: Did you want him to look</p> <p>20 it over, Mr. Riley?</p> <p>21 MR. RILEY: Yes.</p> <p>22 Q (By Mr. Riley) Actually, let me call your</p> <p>23 attention particularly then to Page 22 of 33 as it's</p> <p>24 numbered in the upper-right hand corner.</p> <p>25 MR. RILEY: And, Judge, while the</p>
<p style="text-align: right;">Page 748</p> <p>1 wastewater. Is that correct?</p> <p>2 A Yes.</p> <p>3 Q Do you know how they dispose of those</p> <p>4 wastewaters presently?</p> <p>5 A I do not.</p> <p>6 Q Do you know the extent -- say, the variety of</p> <p>7 businesses that generate Class I non-hazardous</p> <p>8 industrial wastewaters?</p> <p>9 A Yes. It's a significant number.</p> <p>10 Q Okay. Would you think, say, for instance, a</p> <p>11 Jiffy Lube would generate a Class I non-hazardous</p> <p>12 industrial wastewater?</p> <p>13 A Yes, probably they would.</p> <p>14 Q How about a dry cleaner?</p> <p>15 A Yes.</p> <p>16 Q How about a small craft shop that does</p> <p>17 metallurgy?</p> <p>18 A Yes.</p> <p>19 Q How about a flower shop?</p> <p>20 A Yes.</p> <p>21 Q How about a Jack-in-the-Box?</p> <p>22 A Yes.</p> <p>23 Q McDonalds? I don't want to pick out any</p> <p>24 particular fast food restaurant.</p> <p>25 A Yes.</p>	<p style="text-align: right;">Page 750</p> <p>1 witness is doing that, I would offer this into</p> <p>2 evidence as Exhibit 71 -- TexCom Exhibit 71 as Article</p> <p>3 V, discharge of industrial wastes pertaining to the</p> <p>4 publicly owned treatment works in the city of Conroe.</p> <p>5 JUDGE WALSTON: Article V or Article IV?</p> <p>6 MR. RILEY: Oh, I misread it. It's</p> <p>7 Article IV.</p> <p>8 JUDGE WALSTON: Is there any objection</p> <p>9 to TexCom Exhibit 71?</p> <p>10 (No response)</p> <p>11 JUDGE WALSTON: There being no</p> <p>12 objection, TexCom Exhibit 71 is admitted.</p> <p>13 (TexCom Exhibit No. 71 admitted)</p> <p>14 JUDGE WALSTON: What page did you refer</p> <p>15 him to?</p> <p>16 MR. RILEY: 22 of 33. It's Section</p> <p>17 70-163, hazardous waste notification.</p> <p>18 Q (By Mr. Riley) Doctor, if you could, take a</p> <p>19 couple of minutes and just read down through the</p> <p>20 bottom of the page there, I think that would be</p> <p>21 helpful in expediting the questions. It will probably</p> <p>22 take more than a couple minutes, but let me know when</p> <p>23 you're ready.</p> <p>24 (Brief pause)</p> <p>25 A Okay.</p>

1 Q (By Mr. Riley) All set? Am I reading this
2 correctly -- or maybe let me ask you, do you read this
3 to allow for the city of Conroe publicly owned
4 treatment works to accept and receive some volume of
5 hazardous waste?

6 A As it's identified, yes.

7 Q I'm sorry?

8 A As it's identified, yes.

9 Q Assuming that I've correctly -- or I haven't
10 lied to everybody in the room and this really is the
11 city of Conroe's --

12 A No. As the waste is identified, the city can
13 accept it, yes.

14 Q So the city of Conroe wastewater treatment
15 plant can accept some volume of hazardous waste.
16 Correct?

17 A What are you referring to?

18 Q Referring to the part that says, "Discharger
19 exemptions," that says, "Dischargers are exempt from
20 the requirements of subsection (a)" which prohibits
21 the discharge of hazardous waste for a certain amount,
22 if they discharge no more than 15 kilograms of
23 hazardous waste. Do you see that?

24 A Yes, I see that.

25 Q So that would mean that some part -- some

1 amount of hazardous waste could go to the city of
2 Conroe's publicly owned treatment works?

3 A Yes.

4 Q If you'll flip back with me a little bit
5 further, do you see the section entitled -- I believe
6 it's Page 23, so it's not that much further -- 23 of
7 33 -- that the heading is Section 70-164 and then
8 titled Fees?

9 A Yes, I see that.

10 Q Were you aware that the city of Conroe
11 charges a fee to industrial wastewater users and
12 derives a revenue from those users?

13 A Yes, I was aware of that.

14 Q So it doesn't surprise you then that the city
15 of Conroe in this case is opposed to TexCom and that
16 TexCom might take some of that industrial wastewater
17 for injection that the city of Conroe derives revenue
18 from, does it?

19 A Say again.

20 Q Let me try that again. It was a little
21 convoluted. Let's say you're the city of Conroe, I'm
22 TexCom. The city of Conroe is making money from
23 accepting industrial wastewaters into its POTW.
24 Right?

25 A Right.

1 Q That's where the fees come in. Okay. If I,
2 as TexCom, set up my business in the Conroe area and I
3 start accepting industrial wastewaters as well that
4 previously were going to the POTW, you've lost revenue
5 and I've gained revenue. Correct?

6 A Yes.

7 MR. RILEY: May I have just a minute?

8 May I have just a minute.

9 JUDGE WALSTON: Yeah, yeah. I nodded my
10 head. I'm sorry.

11 (Brief pause)

12 MR. RILEY: Those are all the questions
13 I have. Thank you.

14 A Thank you.

15 JUDGE WALSTON: The Executive Director?

16 CROSS-EXAMINATION

17 BY MS. GOSS:

18 Q Good afternoon -- I'm sorry. It's still
19 morning. Good morning, Dr. Pearce. I'm Diane Goss.
20 I have a few questions for you.

21 A Sure.

22 Q Do you recall from your review of the surface
23 facility application how the units of the surface
24 facility function?

25 A No, I'm not aware of that.

1 Q On your prefiled testimony on Page 13,
2 Line 16, you discuss that, that you did review the
3 surface facility application.

4 A Yes, I did review it.

5 Q Let me start there and refresh your memory.
6 Are any of the units -- do you remember if any of the
7 units in the surface facility are wastewater treatment
8 units?

9 A I don't recall that. Help me here. Rephrase
10 that, please.

11 Q I was wondering if you could remember if any
12 of the units that TexCom is proposing to permit at the
13 surface facility for the waste to be treated before it
14 goes downhole are wastewater treatment units.

15 A I don't recall that.

16 Q Let's try -- if the proposed wastestreams
17 that are going to be managed here were to be
18 hypothetically treated to drinking water standards,
19 let's say for instance, by the reverse osmosis method
20 you recommended, would it be necessary to dispose of
21 the effluent as proposed, or it could be recycled,
22 reused or discharged to area wastewaters -- pardon me.
23 Let me repeat that. Let me rephrase that last part --
24 to an area watercourse or surface waters?

25 A Yes, if it was pretreated to drinking water

1 standards, then it could be discharged.

2 Q Dr. Pearce, I'm a waste attorney, so you're
3 going to have to help me out with some of this water
4 stuff.

5 Do the MCLs of -- EPA MCLs apply to the
6 water to be delivered to a public water supply or to
7 the water received by the public water supply before
8 treated?

9 What I mean is the water that will be
10 delivered to the public by the public water supply as
11 opposed to the water received by the public water
12 supply.

13 A The MCLs refer to the water delivered to the
14 consuming public -- our drinking water. That's what
15 the MCLs refer to.

16 Q Thank you. Could you tell me what your
17 understanding of the definition of Class I
18 non-hazardous industrial waste is?

19 A To me, it's vague in that it's -- Class I
20 non-hazardous is waste that is not hazardous but may
21 contain materials that could be hazardous at other
22 concentrations or higher concentrations.

23 Q Thank you. I believe in your answers to
24 Mr. Riley's questions, you mentioned that you don't
25 have any knowledge about the landfilling of Class I

1 non-hazardous wastes. Is that correct?

2 A That's correct.

3 Q And I did follow this line of questioning,
4 but I would like to just have you clarify.

5 Do you advocate the treatment and
6 discharge to surface waters under NPDES permits
7 industrial Class I non-hazardous waste? Let me
8 rephrase that.

9 A Please.

10 Q If we take these wastes that we're proposing
11 to permit this applicant to dispose of in their
12 facility, and rather than that, introduce them to a
13 publicly owned treatment works, like, say, in
14 Montgomery County, or anywhere else for that matter,
15 and then treat them and discharge, would that be the
16 method you would be advocating to use for the disposal
17 of these wastes?

18 A I can't address that. I don't know that.

19 Q I don't think I quite heard what the end of
20 the list that he was running down -- what you did or
21 did not support in terms of how this wastestream
22 should be disposed of.

23 A Well, to me, if Class I hazardous waste is
24 brought into the county and pumped down an injection
25 well, that's unacceptable.

1 JUDGE WALSTON: I don't know if I
2 misunderstood you or if you misspoke. I thought you
3 said "Class I hazardous."

4 A Class I non-hazardous waste --

5 Q (By Ms. Goss) Actually, what I was asking --

6 A -- should not be -- in order for it to be
7 injected, it would need to be pretreated to drinking
8 water standards. And then why would you inject it?

9 Q Actually, what I was asking -- and I
10 apologize if I'm repeating -- totally repeating the
11 earlier line of questioning. I promise to make it
12 short.

13 But what method would you advocate for
14 waste disposal for this material, pretreatment?

15 A Oh, I don't know enough about that to
16 advocate anything.

17 Q Okay. Thank you. And you stated that you
18 weren't familiar with the Class II UIC wells that are
19 in the Conroe field right now injecting material that
20 could be classified as hazardous waste but for a legal
21 exclusion. Is that right?

22 A Right. I am not familiar with that, yes.

23 Q Let's see. Would it surprise you to learn
24 that EPA has ranked levels of disposal in terms of the
25 preferential levels of disposal for protecting the

1 environment and human health?

2 A That would not surprise me, no. In fact, in
3 one of their documents they say that injection wells
4 are a potential source of contamination of
5 groundwater. So they have ranked it right there.

6 Q Okay. Just to make it clear, when I read
7 through your testimony, I couldn't help but think that
8 you were implying that this waste was going to be
9 injected directly into the drinking water.

10 A No.

11 Q Was that your understanding?

12 A No, that is not my position. That is not my
13 understanding. The potential is there, and the United
14 States Environmental Protection Agency has said that
15 injection wells can be a source of contamination of
16 groundwater.

17 And my position is that why put an
18 injection well in that has the potential that the EPA
19 has said has the potential to contaminate the
20 groundwater?

21 Q Do you know that there's a classification
22 system in place that classifies each wastestream under
23 a legal definition?

24 A Yes.

25 Q And did you know that the Class II -- what

1 can be injected in a Class II well would include waste
2 that would have been in contact with toluene and
3 benzene?

4 A I don't know that for -- I don't know that
5 personally.

6 MS. GOSS: I believe that's --

7 MR. WILLIAMS: Wait. Wait.

8 (Brief pause)

9 Q (By Ms. Goss) Since we've been here, we've
10 noticed a lot of newspaper coverage of this case, and
11 we've also noticed a lot of the -- we've heard
12 testimony in this case about groundwater and also
13 surface water needs for the people and the population
14 of this area. And are you aware of a study that was
15 in the newspaper the day before yesterday that's going
16 to be performed and partly financed by the Lone Star
17 Groundwater Conservation District and the city of
18 Conroe?

19 A I'm familiar with it via the newspaper
20 article.

21 Q This says the water quality tests are going
22 to be --

23 MR. GERSHON: Objection; hearsay.

24 MS. GOSS: I'll withdraw the question.

25 Q (By Ms. Goss) Is your firm going to bid on

1 works?

2 A No, no. I don't know of any -- anything
3 about that.

4 MR. WALKER: That's all I have, Your
5 Honor.

6 JUDGE WALSTON: Okay. Any recross?

7 MR. RILEY: I have recross that
8 pertains -- just a couple of questions to the ED's
9 questions, which typically is allowed, but I don't
10 know if it will be. They're very brief, and if
11 there's an objection, I'll understand.

12 JUDGE WALSTON: Okay. Let's hear what
13 your question is.

14 RECCROSS-EXAMINATION

15 BY MR. RILEY:

16 Q You're not familiar, Doctor, with waste
17 classification, either as hazardous, non-hazardous or
18 any other classification. Correct?

19 A Vaguely -- I'm vaguely familiar with it.

20 Q What I mean specifically is that you
21 testified about your knowledge of the safe drinking
22 water act. You're not familiar with the Resource
23 Conservation Recovery Act or the Texas Solid Waste
24 Disposal Act?

25 A No.

1 those testing parameters or the running of those
2 tests?

3 A Absolutely.

4 MS. GOSS: Thank you very much. That's
5 the entirety of my questions.

6 JUDGE WALSTON: Why don't we go off the
7 record for a minute.

8 (Brief pause)

9 JUDGE WALSTON: We'll go back on record.
10 Okay. Any redirect?

11 MR. WALKER: Thank you, Your Honor.

12 REDIRECT EXAMINATION

13 BY MR. WALKER:

14 Q Dr. Pearce, do you know of your own personal
15 knowledge whether or not the city council, as a
16 governing body for the city of Conroe, is opposed to
17 this injection well?

18 A I have that sense, but I don't know what the
19 official position is, but I have that sense.

20 Q All right. Do you have any knowledge -- have
21 you, I guess, read anything or had any personal
22 contact with anyone with the city of Conroe that would
23 suggest to you that their opposition to the well is
24 because they want to collect fees for treating
25 industrial waste at their publicly operated treatment

1 Q And this one may be a little bit out of
2 bounds, but I'll try anyhow.

3 There was some testimony earlier in the
4 case about a major facility here in Montgomery County
5 that transports some portion of its Class I
6 non-hazardous industrial wastewater into Liberty
7 County.

8 My question is, should the people of
9 Liberty County say that that waste should not come in,
10 in your opinion?

11 A If I was living in Liberty County, yes, I
12 would have opposition to that.

13 Q Fair answer. Thank you. I'm just not going
14 to push my luck. Thank you, Doctor.

15 JUDGE WALSTON: Anything else?

16 (No response)

17 JUDGE WALSTON: Thank you, Doctor.

18 A Thank you.

19 JUDGE WALSTON: Okay. We'll break at
20 this time for lunch, and we'll resume at 1 p.m. And
21 who are we going to start with after lunch? Do we
22 know?

23 MS. STEWART: We'll start with Mr. Dan
24 Wilds with Montgomery County.

25 (Recess: 11:58 a.m. to 1:03 p.m.)

<p style="text-align: right;">Page 763</p> <p>1 AFTERNOON SESSION 2 (1:03 p.m.) 3 JUDGE EGAN: All right. We're going 4 back on the record. It is one o'clock on December 14, 5 2007. And Montgomery County or the city of Conroe -- 6 I'm not sure which -- Ms. Stewart, Mr. Walker, who are 7 you going to call next? Ms. Stewart? 8 MS. STEWART: At this time aligned 9 protestants Montgomery County and city of Conroe would 10 call Dan Wilds. 11 (Witness sworn) 12 JUDGE EGAN: Would you state your full 13 name for the record? 14 A Daniel Wilds. 15 JUDGE EGAN: Ms. Stewart, you may 16 proceed. 17 MS. STEWART: Thank you, Your Honor. 18 PRESENTATION ON BEHALF OF THE 19 ALIGNED PROTESTANTS (CONTINUED) 20 DANIEL WILDS, 21 having been first duly sworn, testified as follows: 22 DIRECT EXAMINATION 23 BY MS. STEWART: 24 Q Good afternoon, Mr. Wilds. Mr. Wilds, how 25 are you employed?</p>	<p style="text-align: right;">Page 765</p> <p>1 MS. STEWART: Your Honor, I have 27 for 2 Mr. Wilds as well. 3 JUDGE WALSTON: It may just be the 4 printing. I've got 28 as well. 5 JUDGE EGAN: As long as we can find 6 where it is -- 7 A Page 5, Line 9. It says "pitch flows." It 8 really should be "ditch flows," but that's sort of 9 nitpicky, but that's all I've got. Other than that -- 10 JUDGE WALSTON: Do you see that? 11 JUDGE EGAN: No. We're saying it didn't 12 make a difference, but now we're trying to find it. 13 MR. RILEY: I have it the same as the 14 witness described it, Page 5 of 27, Aligned 15 Protestants Exhibit No. 3. Line 9, the question: 16 "Again, civil engineer is a pretty broad" -- 17 JUDGE WALSTON: Okay. 18 MR. RILEY: Then in the second line, it 19 refers to pitch flows, and the witness has just 20 corrected that. 21 JUDGE EGAN: What should it read 22 instead? 23 A Ditch. 24 JUDGE EGAN: Thank you. 25 Q (By Ms. Stewart) Mr. Wilds, do you adopt</p>
<p style="text-align: right;">Page 764</p> <p>1 A I'm an engineer in the employment of 2 Montgomery County with the county engineer's office. 3 Q And how long have you been employed in this 4 capacity? 5 A About five and a half years. 6 Q Mr. Wilds, have you had the opportunity to 7 provide prefiled testimony in this matter? 8 A Yes, ma'am. 9 Q And have you had an opportunity to review 10 that prefiled testimony and the exhibits that were 11 attached to that testimony as -- I believe it was 3A 12 and 3B? 13 A Yes, ma'am. 14 Q Do you have any corrections to your prefiled 15 testimony? 16 A I have a little minor correction. I found a 17 little typo in there. I don't know if that matters 18 but -- 19 Q Could you please -- 20 A Sure. On Page 5 of 27, Line 9, I believe it 21 is -- 22 JUDGE EGAN: Is it 27 or 28 pages? 23 A I have 27 here. 24 JUDGE EGAN: Am I looking at the right 25 one? I have 28 pages.</p>	<p style="text-align: right;">Page 766</p> <p>1 your prefiled testimony today as if you were 2 testifying live in person from the stand? 3 A Yes, ma'am. 4 MS. STEWART: Your Honor, aligned 5 protestants would offer Exhibits 3, as well as the 6 Attachments 3A and 3B, into evidence. I have copies 7 for the court reporter. 8 JUDGE EGAN: AP Exhibits 3, 3A and B are 9 admitted. 10 (AP Exhibit Nos. 3, 3A and 3B marked and 11 admitted) 12 MS. STEWART: Would you look at the 27? 13 I don't know why, to be honest. 14 JUDGE WALSTON: I'm sure it was just 15 printing differences. Is this an extra one or do you 16 need this one back? 17 MS. STEWART: I was just a little 18 concerned that yours had 28 pages. 19 JUDGE EGAN: It says 8 of 28 at the 20 bottom. 21 MR. RILEY: Is it possible that you're 22 looking at a copy that -- I don't remember any 23 objections to the witness' testimony, so I'm trying to 24 think of a reason they would differ. 25 JUDGE WALSTON: Well, for example, the</p>

<p style="text-align: right;">Page 767</p> <p>1 correction you-all made, it was on Page 5, but it was, 2 like, Line 14 or so. So I think it may just be 3 spacing or formatting. 4 JUDGE EGAN: You're welcome to take a 5 look at them and make any substitutions. I'm sure 6 it's the same, just in larger font or something. 7 MS. STEWART: Okay. Thank you. I would 8 like to check that, just to make sure the pages are 9 the same, at some point during the proceeding. 10 At this time I would offer Mr. Wilds -- 11 I would pass him for cross-examination. 12 JUDGE EGAN: Okay. We're going to Lone 13 Star first. Lone Star? 14 MR. GERSHON: We have no questions. 15 JUDGE EGAN: All right. Mr. Forsberg? 16 MR. FORSBERG: No questions, Your Honor. 17 JUDGE EGAN: Ms. Collins? 18 MS. COLLINS: No questions. Thank you. 19 JUDGE EGAN: Is it Mr. Lee or Mr. Riley 20 this time? 21 MR. RILEY: I am. 22 JUDGE EGAN: Do you have any questions? 23 MR. RILEY: Yes. I have just a few. 24 25</p>	<p style="text-align: right;">Page 769</p> <p>1 A Yes, there was a question, I believe, in 2 there about that. 3 Q Is that the standard you applied in your 4 evaluation of whether the various engineering 5 submittals to the TCEQ were sufficient? In other 6 words -- let me try a simpler question. 7 Did you look at it from the perspective 8 of from someone who works for Montgomery County and 9 viewing it as if the applicant was applying for a 10 building permit? 11 A That was not my intent when I looked at that, 12 no. 13 Q Because I recognize that you offered some 14 portion of your testimony saying there wasn't 15 sufficient detail in the engineering diagrams or some 16 of the engineering diagrams regarding site drainage 17 that would satisfy, I think it's Montgomery County -- 18 A Right. 19 Q -- in issuing a building permit. 20 A That's true. 21 Q That's a separate process, and I just want to 22 be clear. 23 A Yes. 24 Q If TexCom is permitted by the TCEQ to 25 commence this operation, it would have to obtain a</p>
<p style="text-align: right;">Page 768</p> <p>1 CROSS-EXAMINATION 2 BY MR. RILEY: 3 Q My name is John Riley, and I represent the 4 applicant in this matter, TexCom Gulf Disposal, LLC. 5 I want to talk to you a little bit about 6 what I consider one of the topics in your prefiled 7 testimony. I think there are generally two, and I 8 would like to speak with you first about the drainage 9 portion of your testimony. 10 I don't mean to oversimplify it, but I 11 would like to at least get, in gross terms, your point 12 is that if a spill were to occur that was not 13 contained at the TexCom site, it would run in, through 14 natural drainage, and conveyances would be stream beds 15 or channels or whatever natural conveyances there are, 16 and that it ends up in the San Jacinto River. Is that 17 essentially -- 18 A Ultimately the drainage goes in that 19 direction. 20 Q Okay. And you reviewed the testimony -- or 21 excuse me -- the application from the perspective, at 22 least in one portion of your testimony, from the 23 perspective of what kind of detail would be necessary 24 to get a building permit from Montgomery County or the 25 city of Conroe. Is that correct?</p>	<p style="text-align: right;">Page 770</p> <p>1 building permit from Montgomery County and any other 2 local jurisdiction? 3 A Yes, sir. 4 Q At that time, one would expect that either 5 you or some other county official would review that 6 information for its adequacy and make a determination 7 on that front. Correct? 8 A Yes, sir. 9 Q Do you have a design standard for containment 10 that would be used in the -- let me try to set this up 11 a little bit, and then we'll see where we go. 12 Again, referring to Montgomery County 13 and your work, do you participate in the engineering 14 evaluation associated with issuance of a building 15 permit? 16 A Yes, sir. 17 Q And is that a substantial portion of your 18 responsibility with Montgomery County? 19 A It's a large portion of it, yes, sir. 20 Q In that role, is any part of your 21 responsibility -- does it extend to evaluating 22 containment structures at facilities? 23 A Stormwater detention ponds, if you call those 24 containment structures, yes. 25 Q And typically -- or generally then, you're</p>

<p style="text-align: right;">Page 771</p> <p>1 focused on the stormwater aspects rather than the 2 process aspects? 3 A Correct. 4 Q Without suggesting those are too dissimilar, 5 essentially what you're looking at is whether rainfall 6 onto an area would be sufficiently contained by the 7 manmade structure? 8 A Yes. 9 Q So is there -- this is the set-up now. Is 10 there a design criteria that is employed by Montgomery 11 County for containment of a particular storm? The one 12 I'm thinking of is the hundred-year, 24-hour storm 13 event. 14 A Yes, sir. 15 Q Is that the same design criteria that you 16 would look at for purposes of your work? 17 A Yes, sir. 18 Q Now, do you know if that was done in the 19 TexCom application? 20 A I didn't see a specific submittal or 21 something that would necessarily be useful for 22 submittal to Montgomery County. However, I believe 23 there's some calculations in the permit that showed 24 that they -- from the containment area that they were 25 able to contain the 100-year waterfall, I guess you</p>	<p style="text-align: right;">Page 773</p> <p>1 A Well, when we review a site to determine if 2 the engineering done on it meets the county's 3 requirements, we look at the entire site. We look at 4 runoff over the entire site. There are portions of 5 the site that appear to be running off without any 6 stormwater detention, just running off uncontained 7 into the ditch or onto the neighboring property, and 8 so we would want to see how those were addressed. 9 Q So under a county program, you would look at 10 that stormwater runoff and see if it was addressed to 11 the satisfaction of the county? 12 A Yes. 13 Q You said you would look at the whole 14 facility, and as we talked about -- is the general 15 idea about containment that containment is, as it 16 sounds, designed to contain particular storm events? 17 A Right. 18 Q So you wouldn't normally consider that to be 19 part of the stormwater runoff. We're talking about, 20 again, outside of the process or containment area and 21 water that would hit the natural ground and what 22 direction it would go from that point. Correct? 23 A I don't know if I'm following you completely. 24 I think I lost you somewhere in there. 25 Q There's an area in the TexCom application,</p>
<p style="text-align: right;">Page 772</p> <p>1 could say, or the 100-year rainfall falling in that 2 containment area, and they could contain that. 3 Q Do you have any reason to question that 4 calculation or believe that that's incorrect in the 5 application? 6 A No, it looks correct. 7 Q Now, regarding concerns about drainage at the 8 site, could you give me a couple sentences of what 9 your concerns are regarding the TexCom application? 10 Let me -- what I'm driving toward is you 11 expressed some concerns about activities in the TexCom 12 application in relationship to surface water drainage 13 and the ultimate fate, so to speak, of where the 14 waters would go. 15 A Right. 16 Q Correct? 17 A Yes. 18 Q And if I'm following along then, your concern 19 is not about the containment area and storm design. 20 Your concern would be -- would extend outside those 21 boundaries into other aspects of the TexCom proposed 22 site? 23 A Yes. 24 Q Which particular aspects would you be 25 concerned with?</p>	<p style="text-align: right;">Page 774</p> <p>1 more or less a rectangular area, that involves two 2 aspects of the proposed TexCom operation. The first 3 aspect we've been referring to -- or was referred to 4 yesterday as the MCA, which I have to write it down, 5 is the maximum -- or excuse me -- main containment 6 area, and that's the area where the storage tanks are 7 located and so on. 8 And then the other one is referred to as 9 the waste unloading storage area, which we have 10 affectionately named the WUSA. So we've got the MCA 11 and the WUSA as the -- what I'll refer to from this 12 point as the process area. Is that fair? 13 A Yeah. I mean, I'm with you. 14 Q Okay. And that's the area that was designed 15 to contain a 100-year, 24-hour storm event. Is that 16 your understanding? 17 A Falling on that area, yeah. 18 Q So, of course, rain, not knowing where to 19 fall when it falls, it falls all over the 27-acre 20 tract of TexCom, and at least that's the water I would 21 like to discuss with you because I think that's the 22 area of your concern. 23 A Right; yes, sir. 24 Q Now, do you understand the containment area 25 is the area of the facility where the activity -- the</p>

<p style="text-align: right;">Page 775</p> <p>1 unloading activity and the waste handling activity 2 will occur? 3 A Yes. 4 Q And but for some activity occurring outside 5 of that area, such as catastrophic event, truck 6 explodes, something like that, one could expect the 7 waste -- any spills or anything that would -- water 8 that would contain waste products to be in that area. 9 Is that fair? 10 Let's try again. Trucks drive into the 11 facility. 12 A Right. 13 Q They proceed a distance and go into the 14 process area we just described. 15 A Right. 16 Q So one would not expect waste to be released 17 as the truck is driving into the process area but for 18 some other instigating event. 19 A Well, there would have to be some cause that 20 would cause a truck to maybe leak or catastrophically 21 fail before it got to the containment area. I suppose 22 that could happen. 23 Q In the situation we're describing, those 24 would be the instances where waste or waste 25 constituents would be found outside of the process</p>	<p style="text-align: right;">Page 777</p> <p>1 and the floodplain is relevant because that's the 2 direction that one might expect water to flow and then 3 eventually make its way into natural channels. 4 A Well, I think my reason for pointing that out 5 is more that the -- as I recall, the application 6 stating was that water from the site does not flow to 7 any known surface body, and I don't know if that's 8 100 percent accurate based on the floodplain 9 information. 10 Q It is a distance from the floodplain? 11 A Yes, sir. 12 Q So there would have to be some drainage 13 channel, conveyance, ditch that would take it from the 14 site to the floodplain? 15 A Yes, sir. 16 Q And what, in your opinion, is that feature 17 that water from the site -- leaving the site would 18 make its way to the floodplain and in an area that 19 you've described in your maps? 20 A Well, sheet flow off the site would 21 eventually get into a roadside ditch along Creighton 22 Road, and then down to the floodplain. 23 Q That's not different from the property 24 adjacent to the TexCom property -- 25 A Right.</p>
<p style="text-align: right;">Page 776</p> <p>1 area? 2 A Possibly, yes. 3 Q And the rain that would fall on that area 4 outside the process area could go into other -- well, 5 naturally would drain -- would drain somewhere? 6 A Yes, sir. 7 Q That's where -- again, that's just to get us 8 oriented. That's where I'm focused, because I think 9 that's what your concerns involve in the prefiled 10 testimony. Am I right? 11 A Yes, sir. 12 Q You attach some floodplain information as 13 part of your prefiled testimony, and clearly the 14 proposed site is outside of the floodplain. Is that 15 correct? 16 A Yes. 17 Q And any recognized FEMA floodplain? 18 A Yes, sir. 19 Q So it's not a matter of construction in a 20 floodplain; that's not an issue, and that's not what 21 you're trying to highlight in your testimony. Is that 22 correct? 23 A Yes, that's correct. 24 Q You're just trying to show where water goes 25 when it falls in this area around the proposed site,</p>	<p style="text-align: right;">Page 778</p> <p>1 Q -- say to the east -- is that right -- east 2 is -- maybe west? I think west. 3 A Yeah. It's no different than any property in 4 the area. 5 Q So there's nothing unique happening on the 6 TexCom property that isn't happening on, say, a 7 residential property across the road or a commercial 8 property on the corner. It's all flowing in the 9 ditches and flowing downstream to -- in the direction 10 you describe in your prefiled? 11 A Certainly that's not a unique situation. 12 Q What types of facilities are required to have 13 a building permit and address stormwater runoff in 14 Montgomery County? 15 A Any commercial facility that proposes 16 impervious cover greater than 15,000 square feet would 17 be required to prepare a drainage plan or have an 18 engineer prepare a drainage plan. 19 Q And I don't know the square footage. Do you 20 know the square footage of the process area that's 21 proposed by TexCom? 22 A I don't recall at this point. 23 Q I'm going to move quickly now to your 24 concern, and at least addressed in your prefiled 25 testimony regarding the piping from the process area</p>

1 to the injection wells proposed by TexCom. And if I
2 understand your concern, it is that those pipes do not
3 have containment.

4 A Not that I saw; right.

5 Q But they are -- from what you saw and based
6 on your engineering evaluation, those are hard pipes
7 going from Point A to Point B. Is that correct?

8 A That's what it looks like, yes, sir.

9 Q Did you review any portion of TCEQ rules or
10 the TexCom application that related to inspection of
11 those tanks and piping and various other aspects?

12 A I looked at the application, and it -- I
13 didn't study the rules. I looked at the application,
14 and they indicated that inspections would be made.

15 Q And, in fact, they're required?

16 A Right.

17 Q And do you know the frequency of those
18 inspections?

19 A I don't remember.

20 Q Are you familiar with any other commercial
21 facilities that have similar inspection requirements
22 under any environmental rules?

23 A In Montgomery County?

24 Q In Montgomery County.

25 A Not directly, no.

1 Q The section of your testimony entitled "Lack
2 of Containment for Potential Spill of a Truck Space
3 Prior to Reaching the Facility," we use process area
4 for surface facility. Is that the area of -- that you
5 were discussing in your prefiled testimony?

6 A That sounds reasonable, yeah.

7 Q What I'm getting at is your prefiled
8 testimony addressed concerns regarding lack of
9 containment, say, on Creighton Road.

10 A It's more lack of containment until it hits
11 the main containment area or the unloading area.

12 Q So back to what we were discussing earlier,
13 process area, as best as you evaluated it, is a
14 containment area and has been designed for the
15 hundred-year, 24-hour storm event?

16 A Yes.

17 Q And outside of that, again, is the area where
18 your concern is addressing lack of containment outside
19 of that process area?

20 A Yes.

21 Q And as it pertains to the trucks, what type
22 of containment would you say could be designed, say,
23 for a truck entrance that would provide the
24 containment that you would like to see?

25 A I hadn't really thought about the design of

1 the facility, but you would think that a containment
2 system could be designed to handle the runoff from the
3 facility if a truck were to leak or to
4 catastrophically fail once it enters the site.

5 Q And I've met engineers that say they can
6 design anything I tell them, so that's probably true,
7 but the question I have is from your perspective, it's
8 a driveway. I mean, is that a fair calculation or way
9 of saying it?

10 A It appears to be a driveway; yes, sir.

11 Q And to your knowledge, do you know other
12 types of facilities that have containment of the type
13 you would like to see at the TexCom facility on the
14 driveway into their facility?

15 A I'm not aware of any facilities; no, sir.

16 Q Now, there are other industrial facilities in
17 Montgomery County. Correct?

18 A I don't know that for a fact.

19 Q How about the Huntsman Plant, do you know
20 that one?

21 A Yes.

22 Q Can we call that an industrial facility?

23 A Yes, we can; sure.

24 Q Do you know what they make at the Huntsman
25 Plant here in Montgomery County?

1 A No, sir.

2 Q Would the Montgomery County stormwater -- or
3 stormwater program or building permit program require
4 containment for a commercial facility of any type on a
5 driveway into the facility?

6 A Yes, sir.

7 Q So that could be part of a requirement should
8 TexCom's facility be built as part of the building
9 permit?

10 A Okay. Now, let's get clear -- when you say
11 "containment," the county's minimum requirements
12 involve the drainage from the -- say we're looking at
13 the runoff from the site during the hundred-year
14 event, and a site would be required to show in the
15 design that the runoff leaving the site during a
16 100-year events was no greater than it was prior to
17 the development of the site.

18 So it's not necessarily a containment.
19 It's more stormwater detention or mitigation of
20 increased flows.

21 Q All right. And sometimes that's called
22 alteration of natural drainage patterns --

23 A Sure.

24 Q -- or showing that you don't alter --

25 A Right.

<p style="text-align: right;">Page 783</p> <p>1 Q -- natural drainage patterns?</p> <p>2 A Yes.</p> <p>3 Q That's the fundamental purpose then of the</p> <p>4 building permit minimum requirements?</p> <p>5 A Its fundamental purpose is making sure that</p> <p>6 runoff from the site is being managed properly.</p> <p>7 Q If I'm following along, impervious cover,</p> <p>8 just as it sounds, prevents -- or actually causes</p> <p>9 greater runoff from an otherwise undeveloped piece of</p> <p>10 property?</p> <p>11 A Yes, sir.</p> <p>12 Q And if I put a house on a piece of property,</p> <p>13 then I will -- presumably the roof is impervious --</p> <p>14 that I'll cause potentially greater from even a</p> <p>15 residence --</p> <p>16 A Yes.</p> <p>17 Q -- as compared to natural drainage patterns?</p> <p>18 A Yes, sir.</p> <p>19 Q I assume your building permit program doesn't</p> <p>20 go that far, though, and doesn't require a</p> <p>21 demonstration for building permit for a residence,</p> <p>22 that it doesn't alter natural drainage patterns?</p> <p>23 A Not for an individual residence; no, sir.</p> <p>24 Q Apartment building?</p> <p>25 A If it has more than 15,000 square feet of</p>	<p style="text-align: right;">Page 785</p> <p>1 Q If TexCom changed its entrance to the FM 3083</p> <p>2 frontage, would that relieve your concerns regarding</p> <p>3 the capabilities of Creighton Road?</p> <p>4 A Yes.</p> <p>5 MR. RILEY: Thank you, Mr. Wilds;</p> <p>6 appreciate it. Pass the witness.</p> <p>7 MS. GOSS: One moment, Your Honor.</p> <p>8 (Brief pause)</p> <p>9 MS. GOSS: I have no questions. Thank</p> <p>10 you.</p> <p>11 JUDGE EGAN: Any redirect?</p> <p>12 REDIRECT EXAMINATION</p> <p>13 BY MS. STEWART:</p> <p>14 Q Mr. Wilds, if TexCom did change the entrance</p> <p>15 to the facility to its -- off of FM 3083, would you</p> <p>16 have any concerns with that change based on the</p> <p>17 current location of any of its processing area?</p> <p>18 A Well, I would -- certainly, if the process</p> <p>19 area remains in the location, it would make a lot</p> <p>20 longer of a driveway to get down to that processing</p> <p>21 area, would increase impervious cover on the site that</p> <p>22 may have some drainage impacts, but certainly a longer</p> <p>23 path to go to reach that containment area for a truck,</p> <p>24 I would think.</p> <p>25 MS. STEWART: Thank you. I have no</p>
<p style="text-align: right;">Page 784</p> <p>1 impervious cover, then it would be required.</p> <p>2 Q What if it was a really big residence, would</p> <p>3 that qualify?</p> <p>4 A Technically, a residence -- we would not</p> <p>5 require it for a residence.</p> <p>6 Q I want to switch now to Creighton Road and</p> <p>7 your discussion of Creighton Road. I haven't noticed</p> <p>8 you in the room throughout the proceeding. I did see</p> <p>9 you here for some portion of the day today.</p> <p>10 Your prefiled testimony appropriately</p> <p>11 speaks to the facility entrance as it's depicted in</p> <p>12 the TexCom application on Creighton Road.</p> <p>13 Did you also see any portion of the</p> <p>14 TexCom application that indicated their full ownership</p> <p>15 of the property? In other words, did you see a map</p> <p>16 which showed the 27 acres?</p> <p>17 A Yes, sir, I did.</p> <p>18 Q And am I correct that some portion of the</p> <p>19 TexCom 27-acre property has frontage -- about 72 feet</p> <p>20 of frontage on, I believe, it's called FM 3083?</p> <p>21 A I believe I saw that; yes, sir.</p> <p>22 Q And FM 3083, again, in theory, could be</p> <p>23 accessed without TexCom having to acquire any property</p> <p>24 from the TexCom property.</p> <p>25 A It appears so; yes, sir.</p>	<p style="text-align: right;">Page 786</p> <p>1 further questions.</p> <p>2 JUDGE EGAN: Anything further from Lone</p> <p>3 Star?</p> <p>4 MR. GERSHON: No.</p> <p>5 MR. FORSBERG: No, Your Honor.</p> <p>6 JUDGE EGAN: Ms. Collins?</p> <p>7 MS. COLLINS: No. Thank you.</p> <p>8 MR. RILEY: One quick question.</p> <p>9 RECROSS-EXAMINATION</p> <p>10 BY MR. RILEY:</p> <p>11 Q A longer driveway could be addressed, as well</p> <p>12 as a short driveway, in the stormwater process or</p> <p>13 building permit process we've been discussing?</p> <p>14 A Yes, sir.</p> <p>15 MR. RILEY: Thank you.</p> <p>16 JUDGE EGAN: Did you have any questions?</p> <p>17 JUDGE WALSTON: No.</p> <p>18 JUDGE EGAN: Anything further?</p> <p>19 MS. STEWART: No, Your Honor.</p> <p>20 JUDGE EGAN: I kind of bypassed the ED.</p> <p>21 Did you have any questions?</p> <p>22 MS. GOSS: No, Your Honor.</p> <p>23 JUDGE EGAN: Then you are excused.</p> <p>24 Thank you very much.</p> <p>25 Is Mr. Walker going to do the next</p>

<p style="text-align: right;">Page 787</p> <p>1 witness?</p> <p>2 MS. STEWART: I am going to do the next</p> <p>3 witness, Your Honor, Mr. Jimmy Williams.</p> <p>4 MR. WALKER: Just as a point of</p> <p>5 procedure, I guess, or time management, Your Honor,</p> <p>6 Judge Sadler was our next prospective witness, and he</p> <p>7 is in Houston, expects to be back here sometime</p> <p>8 shortly after three o'clock, and I apologize for that</p> <p>9 potential inconvenience, I suppose, but he is heading</p> <p>10 back.</p> <p>11 JUDGE EGAN: Okay. Well, we'll see what</p> <p>12 we can do between now and then.</p> <p>13 You may call your next witness.</p> <p>14 MS. STEWART: At this time, aligned</p> <p>15 protestants Montgomery County and city of Conroe would</p> <p>16 call Jimmy Williams.</p> <p>17 (Witness sworn)</p> <p>18 JUDGE EGAN: State your full name for</p> <p>19 the record.</p> <p>20 A Jimmy Williams.</p> <p>21 JUDGE EGAN: You may proceed.</p> <p>22 MS. STEWART: Thank you, Your Honor.</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 789</p> <p>1 A Yes, I do.</p> <p>2 MS. STEWART: Your Honor, at this time,</p> <p>3 aligned protestants would offer Exhibit 4, as well as</p> <p>4 4A through 4F, and I would like to offer two copies to</p> <p>5 the court reporter. And these should be Pages 1 of 18</p> <p>6 for Exhibit 4 for Mr. Williams' testimony.</p> <p>7 JUDGE EGAN: We have 1 through 20.</p> <p>8 MS. STEWART: May I have the opportunity</p> <p>9 to also check the pages on that as well?</p> <p>10 JUDGE EGAN: I'm pretty certain it's</p> <p>11 probably pagination or something because you wouldn't</p> <p>12 have two changes, but it could change that so that</p> <p>13 ours reflects what everyone else is looking at, it</p> <p>14 would be --</p> <p>15 MS. STEWART: I would appreciate that</p> <p>16 opportunity. Thank you.</p> <p>17 JUDGE EGAN: That's fine.</p> <p>18 MS. STEWART: At this time, I would pass</p> <p>19 the witness for cross-examination.</p> <p>20 JUDGE WALSTON: All right. Let me -- AP</p> <p>21 Exhibit 4, 4A through 4F is admitted.</p> <p>22 (AP Exhibit Nos. 4 and 4A through 4F</p> <p>23 admitted)</p> <p>24 JUDGE EGAN: Lone Star?</p> <p>25 MR. HILL: No questions, Your Honor.</p>
<p style="text-align: right;">Page 788</p> <p>1 JIMMY WILLIAMS,</p> <p>2 having been first duly sworn, testified as follows:</p> <p>3 DIRECT EXAMINATION</p> <p>4 BY MS. STEWART:</p> <p>5 Q Good afternoon, Mr. Williams.</p> <p>6 A Good afternoon.</p> <p>7 Q Mr. Williams, how are you employed?</p> <p>8 A I'm employed as the Montgomery County fire</p> <p>9 marshal.</p> <p>10 Q And how long have you been employed in that</p> <p>11 capacity?</p> <p>12 A Since 2004.</p> <p>13 Q Have you had the opportunity to provide</p> <p>14 prefiled testimony in this matter?</p> <p>15 A Yes, I have.</p> <p>16 Q And have you had an opportunity to review</p> <p>17 that prefiled testimony as well as the exhibits that</p> <p>18 were attached to that prefiled testimony today?</p> <p>19 A I have.</p> <p>20 Q And do you have any corrections to your</p> <p>21 testimony?</p> <p>22 A None that I see now.</p> <p>23 Q Okay. Mr. Williams, do you adopt that</p> <p>24 prefiled testimony today just as if you were</p> <p>25 testifying live in person?</p>	<p style="text-align: right;">Page 790</p> <p>1 JUDGE EGAN: Mr. Forsberg?</p> <p>2 MR. FORSBERG: No questions, Your Honor.</p> <p>3 MS. COLLINS: No questions.</p> <p>4 JUDGE EGAN: Mr. Riley? Mr. Lee?</p> <p>5 MR. RILEY: Yes, ma'am. Just a few</p> <p>6 questions.</p> <p>7 CROSS-EXAMINATION</p> <p>8 BY MR. RILEY:</p> <p>9 Q Good afternoon, Mr. Williams.</p> <p>10 A Good afternoon.</p> <p>11 Q Is it Marshal Williams or Mr. Williams?</p> <p>12 A Mr. Williams will be fine.</p> <p>13 Q Mr. Williams, I understand you've had</p> <p>14 hazardous materials training. I would like to discuss</p> <p>15 that a little bit this afternoon.</p> <p>16 Can you tell me what type of hazardous</p> <p>17 materials training you've had?</p> <p>18 A I have had various levels of training, from</p> <p>19 the first responder through the technician level.</p> <p>20 I've also taught some hazardous materials training</p> <p>21 courses myself.</p> <p>22 Q When we talk about hazardous materials,</p> <p>23 perhaps in the context of emergency response, we're</p> <p>24 talking about -- well, let me say it differently.</p> <p>25 Hazardous materials aren't necessarily</p>

<p style="text-align: right;">Page 791</p> <p>1 waste. There are many products. One would consider a 2 product to be a hazardous material; for instance, if I 3 was transporting gasoline? 4 A Yes, sir. 5 Q So when we talk about hazardous materials -- 6 particularly, in your testimony, you talk about 7 benzene, toluene, some other types of materials and 8 give MSDS information for those materials. Those are 9 the MSDS sheets related to pure benzene. Correct? 10 A I believe they address the products and the 11 properties of benzene most likely in the form that it 12 would be transported had. 13 Q So if I were -- I learned the other day 14 inadvertently that benzene is not only useful but -- 15 let's toluene, maybe that is -- if I were producing 16 toluene and transporting it on a public highway, I 17 would have to carry certain information for folks such 18 as yourself in the event of a mishap or an accident or 19 some fault or failure? 20 A Yes, sir, yes, sir; that would be true. 21 Q And is that the information you would rely on 22 as a first responder; in other words, information a 23 truck driver would have regarding materials he or she 24 was hauling? 25 A Yes, that's one of the first sources of</p>	<p style="text-align: right;">Page 793</p> <p>1 five years, and there are heightened concerns over the 2 transportation of materials that could be used for 3 inappropriate purposes. 4 What I'm referring to is emergency 5 response related to any kind of attack, and like I 6 said, I'm not trying to get too dramatic, but there's 7 been more attention to emergency response generally in 8 the country, and I'm wondering if you've had any 9 training in that regard, whether emergency response 10 for hazardous materials in Montgomery County has been 11 heightened by concerns at the federal level? 12 A Yes, we've had quite a bit of training. 13 Obviously, since 9/11 some of the incidents, there's 14 been additional federal training and state and local 15 training that's been conducted. 16 Q Is there also additional funding that's 17 become available for that type of training and for 18 staffing emergency response teams? 19 A Yes, sir. 20 Q Have you had an opportunity to apply for any 21 of that funding, or has Montgomery County, as far as 22 you know? 23 A Yes, we have. 24 Q And do you have a well trained emergency 25 response team in Montgomery County?</p>
<p style="text-align: right;">Page 792</p> <p>1 information that we would rely on. 2 Q And what would your next activity be in 3 identifying the material? 4 A It would depend, of course, on the amount and 5 severity of the response, but we would involve a local 6 or regional hazardous materials response team, employ 7 some of the equipment we have to try to identify the 8 substance. 9 And if you identify the substance, then 10 you can contact either national centers, or you can 11 consult other information and resources that we have 12 to determine the level of toxicity or the hazard 13 levels of a particular product. 14 Q So am I correct -- and please tell me if I'm 15 not -- that the first responder -- the first task is 16 to -- other than to protect human lives, is to 17 identify the material that one is dealing with? 18 A Yes, sir, that would be correct. 19 Q And without getting too dramatic about this, 20 the next response would be -- once that material is 21 identified, is to gauge the response, whether it needs 22 to be escalated or reduced. Is that a fair comment? 23 A Yes, sir. I believe it would be fair. 24 Q Now, I assume -- and I assume too much. The 25 world has changed dramatically in the last four or</p>	<p style="text-align: right;">Page 794</p> <p>1 A We believe we do; yes, sir. 2 Q Is some part of that federal program that 3 I've been discussing related to what types of 4 facilities are located in the area? In other words, 5 when you apply for this money, it's not just handed 6 out equally to any county, no matter where they are? 7 A No, sir. It's based on threat levels, target 8 hazard information. I would think that -- for 9 example, Montgomery County, our close proximity to the 10 petrochemical industry and the ports and some of that, 11 it's heightened the awareness and it's also allowed us 12 to gain additional funding. 13 Q Would you expect the same funding to be 14 available, say, to Pecos County? 15 A I really wouldn't know what their situation 16 is out there. I could really only just tell you about 17 ours. It depends on the amount of resources that you 18 have, a lot of the funding is. It's also based on 19 what your needs are for your area. 20 Q Fair enough. And moving off that topic and 21 back to the core of your testimony, as it pertains to 22 hazardous materials, are you, in Montgomery County, 23 well qualified to deal with a hazardous materials 24 spill? 25 A We do have -- I believe that we do have some</p>

<p style="text-align: right;">Page 795</p> <p>1 teams that are trained to the technician level, and we 2 are qualified to handle -- or at least to the initial 3 response for hazardous materials instance. 4 Q Do you have an emergency response plan that 5 would -- you could call on when your resources are 6 stretched and you need to look more broadly for 7 additional resources? 8 A Yes, sir, we do. 9 Q What would your next level be in an emergency 10 response situation after Montgomery County has 11 assessed the situation and needs assistance -- 12 determines it needs assistance? What would Montgomery 13 County do? 14 A The way the emergency management system is 15 set up in the state of Texas, basically we would 16 utilize other resources from within our own region. 17 Then we would go outside -- if the event were larger 18 than that region's resources, Harris County, some of 19 the other counties in the Houston metropolitan area, 20 then we would go through the state emergency 21 management system and request resource from other 22 regions of the state and even federal response if 23 necessary. 24 Q If I'm understanding correctly then, if an 25 incident stretched your Montgomery County resources,</p>	<p style="text-align: right;">Page 797</p> <p>1 A Yes, sir. 2 Q Yet you've only had a few instances where the 3 regional level of response has been required and 4 you've been tapped, so to speak, to respond? 5 A Yes, sir. 6 Q Have you reviewed the TexCom application for 7 the types of materials that TexCom is proposing to 8 receive at its facility? 9 A Yes, sir. I believe that that's part of the 10 information that I looked at. 11 Q And what is your understanding of the types 12 of materials that TexCom proposes to receive at the 13 TexCom site? 14 A As I looked at the list, it's somewhat 15 difficult for me to determine exactly what materials. 16 It's more of a -- what I would say is a classification 17 of the types of materials, not specific materials 18 being brought in. 19 Q Fair enough. And are you familiar with waste 20 classification in the state of Texas, or anywhere for 21 that matter? 22 A As it relates to emergency response, yes. 23 Q So you at least appreciate there's a category 24 of waste material that would be considered hazardous? 25 A Yes, sir.</p>
<p style="text-align: right;">Page 796</p> <p>1 you might look, say, to Harris County -- 2 A Yes, sir. 3 Q -- or Liberty County or an adjacent county, 4 something in the regional level? 5 A Initially that -- that would be our initial 6 outreach, would be to the next closest responder. 7 Q Is that well planned, in your opinion? 8 A Yes, sir. 9 Q It's not left to, "Let's give Harris County a 10 call and see if they have anybody available." Right? 11 A No, sir. We have some agreements in place, 12 and we have that plan in place. 13 Q Have you ever been called on by an adjoining 14 county to assist in a response of a hazardous 15 materials incident? 16 A Yes, sir. 17 Q On what frequency has that happened in your 18 tenure with the county? 19 A I would say -- I would classify it as 20 probably infrequent, at best; only a few incidents 21 over the years. 22 Q You've already mentioned the petrochemical 23 industry in this general area of the state and the 24 significance of it. It's a large petrochemical 25 industrial base. Correct?</p>	<p style="text-align: right;">Page 798</p> <p>1 Q And there's a category of waste material that 2 would be considered non-hazardous? 3 A Yes. 4 Q Do you appreciate, chemically speaking -- I'm 5 not -- I think we all appreciate the difference 6 between those two terms, but chemically speaking, do 7 you appreciate the difference between a hazardous 8 waste and a non-hazardous waste? 9 A I would think most of my background is toward 10 identifying and responding to it. From the chemistry 11 side of it, I would know that there's a difference, 12 and I would say that it really goes back to the 13 classification of product, how you classify it, 14 whether its hazardous or non-hazardous. 15 Q Fair enough. And is it your expectation, 16 just by the terminology used, that one is more 17 hazardous than the other? 18 A Well, I think that when we talk about it in 19 terms of emergency response, a lot of what we base our 20 emergency response on is what we know about a 21 particular product, and in cases where we don't have 22 specific knowledge about the product, the standard 23 procedure is -- obviously, for the best part would be 24 to treat it as a worst-case scenario. 25 So we would approach it as a hazardous</p>

<p style="text-align: right;">Page 799</p> <p>1 materials incident. It's hazardous until known 2 otherwise. 3 Q I think that's an appropriate response, for 4 what it's worth from a lawyer, but it certainly makes 5 sense that you would treat it -- in a responsive 6 situation or emergency situation, you would treat it 7 as a worst case until you learn more information? 8 A I think that would be a standard operating 9 procedure from any hazardous materials response team 10 you find across this country. 11 Q Now, the information then becomes critical -- 12 what information one can gain in a relatively short 13 time frame so that the level of response can be 14 gauged. Correct? 15 A Yes, sir. 16 Q Do you understand whether trucks driving to 17 and from the TexCom facility would have information of 18 the type you would need, similar to what you've 19 described earlier regarding transportation of 20 hazardous materials? Do you know if they have any of 21 that information? 22 A I don't have specific knowledge of whether 23 they'll be carrying that information or not. 24 Q If they were carrying that information, is it 25 fair to say that that would be very similar to the</p>	<p style="text-align: right;">Page 801</p> <p>1 testing on scene, even lab testing in some situations. 2 We've had to do that in the past to determine exactly 3 what it is. 4 Q Do you understand that TexCom will have a lab 5 at its site -- or that it's proposing to have a lab at 6 its site? 7 A It's my understanding that there was a 8 proposal for some sort of lab. I don't know what 9 testing it would allow us to have at that facility. 10 Q Do you know that -- or did you review the 11 application sufficiently -- and I'm not sure you were 12 asked to, but did you review the application 13 sufficiently to determine what the waste acceptance 14 criteria would be and how TexCom would proceed -- once 15 it identifies a customer how it would proceed from the 16 point of identification to the point of acceptance? 17 A I know that in reviewing it that there was a 18 lab and there was some criteria. I couldn't speak to 19 the specific criteria, but I know there was some 20 criteria in there for the lab to identify material as 21 it's brought into the facility. 22 Q If there were identification before anything 23 was received -- identification of the material that 24 was to be received, would that be the type of 25 information you would want in the event of an</p>
<p style="text-align: right;">Page 800</p> <p>1 situation we described earlier about the 2 transportation of hazardous materials? 3 A As far as the information about the hazard of 4 the product or not, yes, that would be the information 5 we would refer to initially in an incident. 6 Q Similarly to what we were discussing earlier? 7 A Yes. We refer to it as the shipping 8 information or the shipping papers. From that 9 standpoint, that would be useful information. 10 Q Do you know if Class I non-hazardous 11 industrial waste requires the transporter to keep 12 records of what is being transported? 13 A I know that in most cases, any time that you 14 transport anything like that, there are recordkeeping 15 requirements. I don't know the specific requirements 16 for each class. 17 Q Beyond that, as I understand it then, that 18 would be your initial review. And then you would go 19 further and assure yourself, as an emergency 20 response -- or in an emergency response context that 21 was indeed the material. So you might look to the 22 generator in a waste situation or the producer in a 23 product situation? 24 A That would be ways of doing that. We would 25 also probably look at ways of identifying it on scene,</p>	<p style="text-align: right;">Page 802</p> <p>1 emergency situation? 2 A Yes, sir. 3 Q Excuse me just a minute, Mr. Williams. I 4 need to check my notes. 5 A Sure. 6 (Brief pause) 7 Q (By Mr. Riley) Part of your testimony, 8 Mr. Williams, is what's in the public interest and not 9 in the public interest, and I would like to understand 10 your opinion about a little hypothetical I'm going to 11 work up, but first let me ask you, do you have a sense 12 of the types of businesses that generate what's 13 referred to as Class I non-hazardous industrial waste? 14 A I don't know that I could answer a specific 15 sense of what; no, sir. I think that would be 16 speculation. 17 Q So would it surprise you that, say, a dry 18 cleaner could generate the type of wastewater that 19 TexCom is proposing to inject into its injection 20 wells? 21 A Actually, that would be one of the ones that 22 I know in working with them and with fires that we've 23 had over the years, in some businesses like that, but 24 to cite on a case by case, I think I wouldn't want to 25 speculate about that.</p>

1 Q I'm just going to go down a few just to get
2 your impression of what type of emergency response you
3 think is necessary if -- well, let me ask it
4 differently then.

5 A Okay.

6 Q Are there dry cleaners in Montgomery County?

7 A Yes, sir.

8 Q And are there -- I used Jiffy Lube because
9 it's an easy reference, but Quick Lube is just as
10 good -- lubrication places that also generate Class I
11 non-hazardous industrial waste?

12 A I know that those locations are in Montgomery
13 County, but whether they generate that waste, I can't
14 say.

15 Q That's fair. If those facilities do generate
16 Class I non-hazardous industrial waste, do you have a
17 site-specific emergency response plan, say, for every
18 dry cleaner in Montgomery County?

19 A No, sir. Most of the plans that we have are
20 standard operating procedures for our hazardous
21 materials response that would apply regardless of the
22 business.

23 Q So it's not an additional burden to have a
24 new business move into Montgomery County in the sense
25 of developing a specific emergency response plan for

1 that particular type of business?

2 A We do on what we would classify as target
3 hazards or for larger operations. For the smaller --
4 what I would call a mom-and-pop, you know, like a
5 Quick Lube or a dry cleaners, obviously you couldn't
6 have a specific plan for each one of those, but for
7 our larger industrial businesses and our larger
8 hazards, yes, there are specific plans for those.

9 Q And how are those plans developed?

10 A They're developed generally by a combination
11 of the business and the local emergency responders
12 working together. They provide information that's
13 required through EPA, for example, from some of the
14 right-to-know Tier II information, if you're familiar
15 with that, some of the amounts of hazards of
16 materials, and that information is brought into the
17 plan -- into the county emergency management system,
18 and plans are developed on how to respond based on the
19 information that's really provided by the manufacturer
20 or the industrial user.

21 Q Do you have any industrial waste disposal
22 facilities that you're aware of in Montgomery County?

23 A Not that I'm aware of, that that's their
24 specific business; no, sir.

25 Q Do you know how Class I industrial wastewater

1 is generated in Montgomery County or currently handled
2 and disposed of?

3 A No, sir.

4 Q Is there a landfill located in Montgomery
5 County?

6 A I believe there is; yes, sir.

7 Q Do you know the name of that landfill?

8 A Honestly, it's changed names a couple of
9 times. I don't know what the name is currently of it.

10 Q Do you know where it's located?

11 A Yes, sir.

12 Q Where would that be?

13 A It's located east of the Conroe area, out on
14 Highway 105 east.

15 Q Do you know if it's authorized to receive
16 Class I non-hazardous industrial wastewaters?

17 A No, sir, I don't know that.

18 Q How about the Conroe publicly owned
19 treatments works or wastewater treatment plant, do you
20 know where that is?

21 A Yes, sir.

22 Q Do you know if it receives Class I
23 non-hazardous industrial wastewater?

24 A No, sir. I couldn't tell you whether it does
25 or not.

1 Q I read in the paper just the other day --

2 actually, I think it was yesterday -- that there was a
3 spill of sorts in Montgomery County from a wastewater
4 treatment plant. Are you familiar with that?

5 A Well, I had a little bit of time to read the
6 paper, but I didn't get a chance to read the whole
7 article actually.

8 Q I don't mean to be cute, but it obviously did
9 not warrant an emergency response that reached to your
10 level. Is that your understanding?

11 A Well, local responders may have initially
12 responded to it. I know that the Texas Commission on
13 Environmental Quality was notified, and it's my
14 understanding that that's what they were required to
15 do under state regulations in that situation.

16 Q And, again, I'm not trying to sandbag you
17 here, but do you know the volume of material that was
18 spilled -- I think it was yesterday -- maybe the day
19 before from this wastewater treatment plant?

20 A If I recall correctly, it was 150 or
21 170,000 gallons.

22 Q And to the best of your knowledge, TCEQ
23 responded to that emergency?

24 A I know they were notified, and certainly I
25 would expect that they would be responding to that.

1 Q That was in Montgomery County. Correct?
 2 A Yes, sir.
 3 Q Did you express some concerns about the
 4 capability of the TCEQ to handle or respond to
 5 situations or spills?
 6 A I guess -- could you rephrase or restate that
 7 one?
 8 Q Yeah. I thought I had seen where you
 9 thought that -- maybe it's in the Judge's testimony.
 10 I apologize to you. I thought there was some
 11 expression that TCEQ would likely push down some of
 12 their responsibility to Montgomery County.
 13 A I'm sorry. Are you talking about in my
 14 testimony?
 15 Q Honestly, I thought it was in your testimony,
 16 but I may be in error.
 17 Has that been your experience, though,
 18 that you have been burdened by the TCEQ's failure to
 19 respond?
 20 A I don't think that -- I don't know that it's
 21 a failure to respond. I think there's some areas
 22 where we respond and work with them, and really, it
 23 goes to what our resources are capable of handling at
 24 some point. There's a difference between emergency
 25 response and clean-up and mitigation.

1 Really, the fire service and emergency
 2 management's role is to handle the incident from an
 3 emergency standpoint. Clean-up and mitigation falls
 4 back to either the shipper or the manufacturer or the
 5 responsible party, and that's not something that a lot
 6 of times we get involved in.
 7 And that's probably more of the TCEQ's
 8 rule, not necessarily doing that, but monitoring that
 9 mitigation and clean-up from the spill party
 10 themselves.
 11 Q In your role as fire marshal for the length
 12 of time you've been in service, have you had occasions
 13 to work cooperatively with the TCEQ in instances that
 14 required the TCEQ-level response?
 15 A Yes, sir.
 16 Q Have you found those interactions positive?
 17 A I think, for the most part, we've worked well
 18 with them. Again, I think their response role is more
 19 to monitor the situation and the clean-up, whereas our
 20 response role is to handle the initial emergency.
 21 And generally, we'll turn that over to
 22 them to monitor once we've gotten whoever had the
 23 spill or the manufacturer or the responsible party
 24 there on scene to take over.
 25 Q Thank you, Mr. Williams; appreciate it.

1 A You're welcome.
 2 MR. RILEY: Pass the witness.
 3 JUDGE EGAN: Any cross-examination?
 4 CROSS-EXAMINATION
 5 BY MS. GOSS:
 6 Q Good afternoon, Mr. Williams. My name is
 7 Diane Goss, and I want to ask you a few questions.
 8 Were you here this afternoon just prior
 9 to your testimony --
 10 A Yes.
 11 Q -- in the courtroom?
 12 A No, not in the courtroom.
 13 Q Okay. Thank you. I just wanted to know if
 14 you heard some of the earlier testimony today.
 15 A No, I did not.
 16 Q Thank you. Do -- I want to ask a couple of
 17 questions. Does the city of Conroe have a fire
 18 department?
 19 A Yes, they do.
 20 Q And is that jurisdiction defined by the city
 21 limits?
 22 A Yes.
 23 Q And do I understand that you're the fire
 24 marshal for the county fire department?
 25 A That's correct.

1 Q Is that overlapping the jurisdiction?
 2 A Well, the Montgomery County fire marshal's
 3 office, we're responsible for overseeing, coordinating
 4 and working with the fire service in the
 5 unincorporated areas of the county.
 6 As part of that job, obviously, we work
 7 with someone who is a major player in the fire
 8 service, such as the Conroe Fire Department, but our
 9 jurisdiction is generally in the unincorporated areas.
 10 Q Thank you. And I'm -- this question is based
 11 on -- you mention in your prefiled testimony that you
 12 have reviewed the application, so I'm going to be
 13 asking a few questions. I believe that you stated in
 14 Mr. Riley's examination that you're not familiar with
 15 the waste classification system.
 16 A Well, the reporting requirements, I think,
 17 was the specific question.
 18 Q I'm going to ask you the question then. Are
 19 you familiar with the waste classification in Texas,
 20 the way that we classify waste?
 21 A I guess -- can you be more specific?
 22 Q Like, for instance, this application is for
 23 non-hazardous waste. So non-hazardous would be a
 24 classification, or Class I, or hazardous. Are you
 25 familiar with that?

1 A As far as the differences between them? No,
2 I'm not aware of the specific differences or criteria.
3 I would assume that there are criteria that would
4 designate it as one or the other, and I don't have
5 that information.

6 Q Thank you. I'll make my questions then
7 according to that. And you have included some MSDS
8 sheets here for some materials that -- I have no kind
9 of chemistry background whatsoever, but these are some
10 "bad boys" in terms of chemicals you don't want to run
11 into when you're in an emergency response, and also,
12 many of these have a really high boiling point, I
13 believe; the MSDS sheets for some of the things that
14 you have as Exhibits A, B and C of your prefiled
15 testimony.

16 And is it your understanding that the
17 wastestreams that would be injected -- what kind of
18 percent would you think maybe that would be if
19 somebody -- let me rephrase that.

20 Would you agree with a lay
21 characterization of the waste proposed as wastewaters?

22 A I don't know how I would agree with that. I
23 don't have enough information to agree or disagree
24 with that.

25 Q The reason I say that is because I was

1 concerned, when I read your testimony, that you might
2 think they were proposing to inject some of these
3 constituents -- or rather, these chemicals where it
4 was primarily the chemical as opposed to primarily
5 water with traces of these elements in it.

6 A I think my testimony centers around the
7 nature of these materials, how we identify them and
8 whether they're hazardous or not. I'm not really up
9 here to testify about what percentage. That's not in
10 my area that I was asked to testify.

11 Q Thank you, sir. And I believe I didn't quite
12 state that clearly enough. What I was trying to get
13 at was whether or not you understood that the waste
14 proposed to be disposed is considered to be
15 wastewater.

16 A Again, I don't have an understanding. I
17 don't have any information whether it's going to be
18 wastewater, whether it's going to be those materials.

19 Q Would it make a difference to the analysis of
20 the types of response that your team would have to
21 perform if you thought that the waste that was going
22 to be disposed; therefore, the waste that could
23 hypothetically be released into the environment or
24 spilled, would be wastewater?

25 A I think when we're talking about our

1 response, it really would not make a difference in our
2 response to an incident where that material was
3 spilled until we identified it.

4 Q Thank you. And are you familiar with the
5 Texas Department of Transportation placarding system?

6 A Yes.

7 Q And are you aware whether or not the
8 transporter of this waste would be required to follow
9 that in order to transport this waste in your county?

10 A Again, I don't know the specific
11 requirements, because, honestly, from the information
12 that's in there, you don't know exactly what wastes
13 they're transporting. A lot of that, as I said
14 earlier, is classifications of materials that could be
15 transported, but it doesn't go into the specific
16 materials themselves or their components. That would
17 be our concern as emergency responders.

18 Q Thank you. Would it make a difference to you
19 if you knew that if you responded to a truck that had
20 an incident and if it were properly following the
21 rules from the Texas Department of Transportation,
22 that it would have placarding in place so that you
23 would be able to determine when the first -- either
24 the bystanders or you were properly informed in the
25 911 call or the first first responder on the scene

1 would then be able to have a lot more information from
2 the placarding about what was involved? Would that
3 help?

4 A The placarding would help, yes.

5 MS. GOSS: Excuse me just one moment.
6 (Brief pause)

7 Q (By Ms. Goss) You had some testimony about
8 the public interest, and I notice that you stated "the
9 public interest of the citizens of Montgomery County."
10 So are you testifying about the public interest in
11 general or about the interest of the citizens as
12 Montgomery County? Is that separate, or is that the
13 same to you?

14 A I'm not sure I really follow your question.

15 Q That was a compound question. Let me
16 withdraw the question.

17 Are you testifying that you don't think
18 this would be in the best interest of the citizens of
19 Montgomery County?

20 A Yes.

21 Q And do you define the public interest as the
22 interest of the citizens of Montgomery County?

23 A Yes.

24 Q Thank you. Could you tell me how you -- in
25 your opinion here that it's not in the public interest

1 of the citizens of Montgomery County to have waste
2 disposal of this type in the county?

3 A I believe this is premised on the fact that
4 first responders would not know what they were
5 responding to and that it would be stretching the
6 resources too thin or perhaps taxing the resources for
7 first response.

8 Q Would you say that you have a system in your
9 mind of how you would -- sorry. Let me rephrase.

10 How would you prioritize which type of
11 commercial activities that you would want to prohibit
12 from entering the county that might require an
13 emergency response from your team, or are there any
14 other businesses or industries or commercial
15 activities that you would want to not have come to
16 Montgomery County because it would be too taxing or
17 cause too much of an unknown quotient onto your
18 emergency response?

19 A I believe that in any situation there are
20 some businesses and hazards that you may not want.
21 That's the general basis behind such things as codes
22 and building codes and fire codes.

23 One of the steps we've just taken is to
24 implement a countywide fire code, and that is an
25 effort to reduce the hazard by -- in fact, maybe

1 prohibiting some situations that could be hazardous or
2 making other situations that could be hazardous safer
3 for the general public.

4 So, yes, I think there are situations
5 where you have that, and you take steps to either
6 minimize that risk or eliminate that risk from your
7 area.

8 Q Could you give me another example of another
9 business or commercial activity that you would want to
10 discourage from entering the county because it would
11 not be in the public interest because of these fire
12 marshal concerns that we've discussed about the
13 resources of the first responders and the unknown
14 characteristics of materials that would be --

15 A Just a specific business?

16 Q Like, for instance, would any other waste
17 business be discouraged as well?

18 A I think it depends on the situation, but
19 obviously, it would be something that would be of
20 great concern. You would have to look at -- again, go
21 back to referencing safety codes, life safety codes
22 and building and fire codes, how that waste is going
23 to be transported, handled, how it's going to be in
24 our community. That's the concern that any community
25 would have, and that's why they have those codes in

1 place.

2 You know, again, I go back to you want
3 to take steps to minimize that risk. In some cases --
4 we do this all the time when we talk to someone. Does
5 that mean you shouldn't have that business next to a
6 school or a daycare? It may be that way, and there
7 are specific situations like that that you have
8 concern for, and you take steps to eliminate those
9 risks. You may require that business to locate
10 elsewhere. You may not want them in your community.

11 Q Do you have -- in this fire code that you
12 said you've recently adopted, is there any part of
13 that that you believe would apply to this proposed
14 applicant's facility?

15 A I believe that it would apply to it, and it
16 depends on the construction that's going to take place
17 at the site and when it takes place, but, yes, there
18 are parts of the code that would apply.

19 Q Thank you very much.

20 MS. GOSS: I have no questions.

21 MR. WILLIAMS: Wait a moment.

22 (Brief pause)

23 Q (By Ms. Goss) Thank you. I have another
24 question, please. Would you please tell me if you've
25 had any emergency responses at the Huntsman facility?

1 A Yes, we have.

2 Q And do you feel that you are properly
3 resourced or prepared with the resources and the
4 staffing to be able to respond to that facility --
5 emergencies that would occur at that facility?

6 A We have -- I believe that we do have, at
7 least for an initial response. Obviously, there could
8 be -- in any scenario, there could be emergency
9 incidents that outstrip our resources, and that's why
10 we have plans and we work with other agencies and
11 other jurisdictions.

12 MS. GOSS: Thank you very much.

13 JUDGE EGAN: Any redirect?

14 MS. STEWART: No, Your Honor. I have no
15 further questions.

16 JUDGE EGAN: Thank you very much.

17 Are you ready to call your next witness?

18 MR. WALKER: Your Honor, I am sorry.

19 JUDGE WALSTON: Is that the only one we
20 have left for you?

21 MR. WALKER: Judge Sadler is my last one
22 here today.

23 JUDGE EGAN: Let's go off the record and
24 see if we can get anything else done while we're
25 waiting.

<p style="text-align: right;">Page 819</p> <p>1 (Recess: 2:08 p.m. to 3:45 p.m.) 2 JUDGE EGAN: We're back on record. 3 (Witness sworn) 4 JUDGE EGAN: Would you state your full 5 name for the record? 6 A Alan Barber Sadler. 7 JUDGE EGAN: Mr. Walker, go ahead and 8 proceed. 9 MR. WALKER: Thank you, Your Honor. 10 ALAN B. SADLER, 11 having been first duly sworn, testified as follows: 12 DIRECT EXAMINATION 13 BY MR. WALKER: 14 Q Judge Sadler, just briefly, if I may, what is 15 your current position here with the county? 16 A County Judge, Montgomery County. 17 Q All right. Judge Sadler, have you had an 18 opportunity in this particular matter to prepare some 19 prefiled testimony? 20 A Yes. 21 Q Have you had an opportunity lately to review 22 that prefiled testimony? 23 A Within the last 30 days. 24 Q All right. Judge Sadler, are you in a 25 position to offer that prefiled testimony in the same</p>	<p style="text-align: right;">Page 821</p> <p>1 values, those deletions that are blacked out, those 2 redactions, with those being made, do you adopt your 3 testimony at this time? 4 A Are you saying I agree to these deletions? 5 Q And the balance of the testimony, yes, sir. 6 A I'm agreeing to the balance of the testimony, 7 that's correct. 8 MR. WALKER: Your Honor, we would offer 9 into evidence at this time Aligned Protestants 10 Exhibit 5, the prefiled testimony of Judge Alan B. 11 Sadler, and we'll tender copies to the court reporter. 12 JUDGE EGAN: I don't believe there were 13 any objections that haven't already been ruled on. 14 Given that, AP Exhibit No. 5 is admitted. 15 (AP Exhibit No. 5 marked and admitted) 16 MR. WALKER: Your Honor, we would pass 17 the witness for cross-examination. 18 JUDGE EGAN: Lone Star, any questions? 19 MR. GERSHON: No questions. 20 MR. HILL: No questions. 21 JUDGE EGAN: Mr. Forsberg? 22 MR. FORSBERG: No questions, Your Honor. 23 JUDGE EGAN: Ms. Collins? 24 MS. COLLINS: No questions. 25 JUDGE EGAN: Mr. Riley? Mr. Lee?</p>
<p style="text-align: right;">Page 820</p> <p>1 fashion as if you were taking the stand and testifying 2 live? 3 A Yes. 4 Q Let me show you, if I may, Judge Sadler, a 5 copy of your prefiled testimony, and specifically, if 6 you will look at Pages 6 and 7, are there any changes 7 that you need to make to that testimony? 8 A Are you referring to the areas that have been 9 blacked out? 10 Q Yes, sir. Are there some redactions to your 11 prefiled testimony? 12 A There are six lines that have been blacked 13 out. 14 Q If you would, look at Page 7. 15 A There are two lines that have been blacked 16 out there. 17 Q All right. And for the record, Judge Sadler, 18 would that be on Page 6, Lines 17 through 22, and on 19 Page 7, Lines 1 and 2? 20 A That's correct. 21 Q With those deletions, do you adopt your 22 prefiled testimony at this time? 23 A I'm not sure what the deletions are. 24 Q Well, all right. With those deletions, for 25 the record, that have made reference to taxable</p>	<p style="text-align: right;">Page 822</p> <p>1 MR. RILEY: Yes, Judge. 2 JUDGE EGAN: You have cross? Go ahead. 3 MR. RILEY: Yes, Judge. Just a few 4 questions. 5 CROSS-EXAMINATION 6 BY MR. RILEY: 7 Q First of all, let me introduce myself. My 8 name is John Riley. I represent the applicant in this 9 matter, TexCom Gulf Disposal, LLC. Judge, I just have 10 a few questions about your prefiled testimony. 11 Hopefully it won't take very long. 12 I would just advise you I appreciate the 13 effort you made getting here this afternoon, and 14 hopefully we'll all be on our way shortly. 15 I also would like to say, just at the 16 outset, I recognize you as the County Judge and have 17 respect for that position. My questions are not 18 intended in any way to be disrespectful, but I do have 19 some questions, though, about the foundation for some 20 of your testimony. 21 A All right. 22 Q Thank you. I understand that you've been 23 County Judge for some 17 years in Montgomery County. 24 Is that correct? 25 A That's correct.</p>

<p style="text-align: right;">Page 823</p> <p>1 Q Prior to that, you made a career in banking. 2 Is that correct? 3 A That's correct. 4 Q Is it fair to say, Judge, that you do not 5 have a depth of experience or training in 6 environmental science or environmental issues? 7 A That's correct. 8 Q And much of your testimony is regarding your 9 observations as County Judge, regarding population 10 growth in Montgomery County and things of that nature? 11 A I would say it's more than that. 12 Q All right. Well, let's explore it a little 13 bit. As County Judge of Montgomery County, are you 14 aware of the county's authority to regulate municipal 15 solid waste in the county? 16 A I'm not familiar with the regulations, per 17 se, no. 18 Q Okay. And does Montgomery County, to the 19 best of your knowledge, regulate either municipal or 20 industrial solid waste in Montgomery County? 21 A It's under the purview of the TCEQ with 22 limited authority by our environmental health 23 department. 24 Q But the county, under the Texas Solid Waste 25 Disposal Act, has certain authority, should it decide</p>	<p style="text-align: right;">Page 825</p> <p>1 landfill and had the opportunity to visit with Judge 2 Gattis at some length in that proceeding, and at least 3 Judge Gattis' perspective was as part of his 4 responsibility as County Judge, he needed to make 5 provision for the residents of his county in the 6 disposal of their waste. Would you share that 7 feeling? 8 A The problem I have with that question is it's 9 misleading in that I'm not providing for the residents 10 of this county for the injection of semi-hazardous 11 wastewater into the aquifer. 12 Q I'm not on your testimony. I'm speaking in 13 more general terms; your view of your position as 14 County Judge, whether you see it as part of your 15 obligation to make sure that the waste disposal needs 16 of the residents of this county, including its 17 businesses, are provided for. 18 A The county is not in the solid waste 19 business. We never have been to my knowledge. The 20 city of Conroe has been, but not Montgomery County. 21 Q So if I understand your answer to my question 22 then, your answer would be, no, you don't see it as 23 part of the county's responsibility to provide that 24 service? 25 A That's correct.</p>
<p style="text-align: right;">Page 824</p> <p>1 to act in that regard, and I'm asking you, in your 17 2 years, do you know if the county has adopted any solid 3 waste regulation ordinances? 4 A Our environmental health department deals 5 with illegal dumping and other environmental issues on 6 a regular basis. 7 Q Other than what you've described, sir, is 8 there any other authority that you're aware of that 9 the county has exercised in the disposal of solid 10 waste? 11 A No. 12 Q The testimony you offer indicates that 13 Montgomery County is a rapidly growing county in the 14 state of Texas. Is that correct? 15 A That's correct. 16 Q And do you know of other rapidly growing 17 counties in the state of Texas? 18 A I would say six to ten others. 19 Q Would Williamson County be one of those other 20 counties? 21 A Probably the top. 22 Q And do you know Judge Dan Gattis? 23 A No. 24 Q I had the privilege of representing 25 Williamson County in a recent matter involving a</p>	<p style="text-align: right;">Page 826</p> <p>1 Q The population growth that you anticipate in 2 Montgomery County, have you considered whether the 3 waste disposal needs are met in Montgomery County? 4 A They are adequately being met at this time in 5 my opinion. 6 Q And that's -- the essence of my question is 7 what about the future growth that you discuss in your 8 prefiled testimony; do you anticipate future waste 9 disposal needs in Montgomery County? 10 A Of course. 11 Q And do you know if those will be adequately 12 provided for by the current waste disposal services in 13 Montgomery County? 14 A Of course the waste disposal services in 15 Montgomery County today are being provided by private 16 enterprise. I've been told that we have probably 30 17 years remaining at solid waste municipal landfills. 18 Q All right. And do you know what solid waste 19 municipal landfills are providing the service to the 20 residents of Montgomery County at this time that would 21 provide that 30 years? 22 A Are you saying are they providing that 23 service? 24 Q I'm saying which ones are they that are 25 providing the waste disposal services for Montgomery</p>

<p style="text-align: right;">Page 827</p> <p>1 County.</p> <p>2 A The Security landfill.</p> <p>3 Q And who is the operator of the Security</p> <p>4 landfill, if you know?</p> <p>5 A I believe it's Waste Management.</p> <p>6 Q I believe that's correct. Do you know of an</p> <p>7 application for a landfill -- a new landfill that's</p> <p>8 currently pending at the TCEQ for a company -- I</p> <p>9 believe it's called Montgomery Landfill Solutions?</p> <p>10 A I'm familiar with that, yes.</p> <p>11 Q Has the county -- Montgomery County taken a</p> <p>12 position with regard to that application?</p> <p>13 A We are opposed to it.</p> <p>14 Q As I recall, the TCEQ records indicate that</p> <p>15 there's some 700 hearing requests regarding that</p> <p>16 Montgomery Landfill Solutions project. Is that your</p> <p>17 understanding?</p> <p>18 A Yes, it is.</p> <p>19 Q Where would that be located? Where was it</p> <p>20 proposed to be located?</p> <p>21 A Very near the existing Security landfill on</p> <p>22 the north side of Highway 105 east.</p> <p>23 Q Do you know if that application is also a</p> <p>24 Waste Management application?</p> <p>25 A It is not.</p>	<p style="text-align: right;">Page 829</p> <p>1 aquifers are recharged.</p> <p>2 Q Well, I noticed in your testimony that you</p> <p>3 talked about they're not recharging quickly enough,</p> <p>4 and so I want to understand that, as to what your</p> <p>5 knowledge base was for offering that testimony.</p> <p>6 A Okay. The information I received has been</p> <p>7 mostly from the Lone Star Groundwater Conservation</p> <p>8 District regarding the availability of groundwater in</p> <p>9 Montgomery County.</p> <p>10 At this time, according to the Lone Star</p> <p>11 Groundwater Conservation District and according to</p> <p>12 their professionals, we are, in fact, mining the</p> <p>13 aquifer at this time, which means we're taking out</p> <p>14 more water than is being recharged. I could not tell</p> <p>15 you the exact quote of who these professionals are</p> <p>16 exactly, but the source of this information is from</p> <p>17 the Lone Star Groundwater Conservation District.</p> <p>18 Q So that would suggest, sir, that your future</p> <p>19 growth needs would require you to either conserve</p> <p>20 water and use the available resources in the aquifer</p> <p>21 or come up with additional drinking water sources. Is</p> <p>22 that fair?</p> <p>23 A That's correct, and we're working on that</p> <p>24 solution at this time.</p> <p>25 Q What ideas have you proposed or have been</p>
<p style="text-align: right;">Page 828</p> <p>1 Q Why are you opposed to that landfill, sir?</p> <p>2 A Historically, Montgomery County has been in</p> <p>3 the crosshairs of Harris County's industrial complex</p> <p>4 as a dumping ground for years, and we're continuing to</p> <p>5 be in those crosshairs, and I intend to do all I can</p> <p>6 to stop it.</p> <p>7 Q I appreciate that. Do any of the residents</p> <p>8 of Montgomery County benefit from the industrial</p> <p>9 complex in the Houston area?</p> <p>10 A I couldn't answer that yes or no.</p> <p>11 Q Do you know if any residents are employed in</p> <p>12 those industries?</p> <p>13 A They may be; most likely are.</p> <p>14 Q Under the groundwater resources that you're</p> <p>15 concerned with in your prefiled testimony, how are</p> <p>16 they recharged, from what source?</p> <p>17 A Rain.</p> <p>18 Q Do you know in particular, geographically</p> <p>19 speaking, where the recharge zones are for the</p> <p>20 aquifers of concern?</p> <p>21 A I could not tell you the exact location, no.</p> <p>22 Q Tell me all that you know about the recharge</p> <p>23 features of the aquifers of concern.</p> <p>24 A I don't think it's appropriate for me to get</p> <p>25 involved in the geological discussions of how the</p>	<p style="text-align: right;">Page 830</p> <p>1 proposed thus far?</p> <p>2 A We're working on a surface water plan.</p> <p>3 Q Could you be more specific or elaborate</p> <p>4 further?</p> <p>5 A Of course, we will continue to use the</p> <p>6 groundwater into the future, but the groundwater</p> <p>7 resources today are not adequate for the future</p> <p>8 growth. The Lone Star group, along with the San</p> <p>9 Jacinto River Authority, is working on a major partial</p> <p>10 transformation to a surface water in Lake Conroe.</p> <p>11 Q So you're negotiating a water deal or at</p> <p>12 least looking in to negotiating a water deal for</p> <p>13 surface water resources to meet your potable water</p> <p>14 needs?</p> <p>15 A It's a partial need, yes.</p> <p>16 Q And when you said earlier that currently the</p> <p>17 aquifer is being mined, am I correct in assuming that</p> <p>18 means that it's being withdrawn from faster than it</p> <p>19 can replenish?</p> <p>20 A That's correct.</p> <p>21 Q What is the expected -- is there a prediction</p> <p>22 of when that groundwater resource would be exhausted?</p> <p>23 A I'm not qualified to answer that.</p> <p>24 Q I thought maybe in your dealings you might</p> <p>25 know the answer.</p>

1 A I really don't.

2 Q The surface water plan, how far would that
3 extend, to your understanding, the groundwater
4 needs -- or meeting the groundwater needs of the
5 residents of Montgomery County? I meant the drinking
6 water.

7 A If you take the plan that's being proposed,
8 and by the way, being worked on as we speak, if you
9 take the combination of groundwater and surface water,
10 it should meet the needs for the long-term future of
11 the county.

12 Q That would depend on drinking water sources
13 from the surface. Is that correct?

14 A Surface and ground.

15 Q Do you know of alternative means or methods
16 for disposal of Class I non-hazardous industrial waste
17 as proposed to be disposed by TexCom?

18 A I don't.

19 Q I know you're not on the technical side of
20 this case, and as I said earlier, I don't mean any
21 disrespect. Do you know what a Class I non-hazardous
22 industrial waste is?

23 A I've seen the definition.

24 Q In your testimony -- your prefiled testimony,
25 you said that you didn't know of any businesses in

1 Montgomery County that needed such a service, that
2 needed a disposal service for Class I non-hazardous
3 industrial wastewater. Am I understanding you
4 correctly?

5 A That's correct.

6 Q What types of businesses, to your
7 understanding, sir, generate or create Class I
8 non-hazardous industrial solid waste or wastewater?

9 A I think the list is numerous, is many. I
10 don't know the exact names of the various industries.

11 Q I did a query of a TCEQ database for -- the
12 title of the report is Industrial and Hazardous Waste
13 Registration Directory Report, and its boundary is the
14 Montgomery County directory. I thought that I would
15 explore that a little bit with you.

16 It's about 44 pages. It's late on
17 Friday afternoon, and I don't intend to read all the
18 businesses to you, but I was wondering if you
19 understood or knew prior to my telling you that such a
20 business as the Splish Splash Power Washing Service
21 generates industrial wastewater?

22 A I'm not aware of that.

23 Q And I picked some of the sillier ones just
24 because I thought it would be interesting, but do you
25 know of a company named Aironex Pharmaceuticals?

1 A I've heard the name.

2 Q I believe it's located in The Woodlands.
3 That's in Montgomery County?

4 A Yes, it is.

5 Q They're another generator of the types of
6 materials that TexCom would propose to take.

7 Live Oak Dry Cleaners -- and I could go
8 on, sir, but would you agree with me that there are
9 many businesses in Montgomery County that actually
10 generate the type of waste that TexCom proposes to
11 dispose of?

12 A I understand the reasoning of your
13 questioning and the line of questioning, and you're
14 trying to imply that --

15 Q No. I'm asking for an answer to my question.

16 A I am going to answer the question.

17 Q All right.

18 A You're trying to imply that we should maybe
19 support this facility for Montgomery County
20 businesses. That is not correct. There may be one or
21 two or three or four -- maybe five businesses that may
22 use this. I would be willing to estimate, sitting up
23 here on this stand, that 95 percent of the trucks that
24 come to this facility are in fact out of Harris
25 County, Liberty County, other industrial counties or

1 even out of state.

2 Q I hear what you're saying, sir, but I'm
3 asking you --

4 A Would you agree with that?

5 (Laughter)

6 JUDGE EGAN: Judge Sadler, I'll remind
7 you, you're a witness in this case.

8 Q (By Mr. Riley) I'll do you the courtesy of
9 an answer. No, I don't.

10 What I would also like to -- I'll just
11 put this up here on the counter. Maybe you can see it
12 from where you're sitting. It's about a four-inch --
13 maybe five-inch ream of paper. Those are the
14 Montgomery County waste generation reports from
15 2006 for Class I non-hazardous industrial waste.
16 Would you agree with me that that's a substantial
17 amount of paper at least?

18 A Looks like it.

19 Q Have you taken the opportunity to review the
20 waste reports for any year of the actual businesses in
21 Montgomery County, not out of state or Harris County
22 or anywhere else, that generate Class I non-hazardous
23 industrial waste?

24 A No, but let me say this: I've not received
25 one phone call nor one letter -- nor one letter of

1 support for this facility from a local business
 2 saying, "Please support this facility because I need
 3 to inject my water in this well," not one letter, not
 4 one phone call, not one bit of communication in
 5 support of -- one business in Montgomery County in
 6 support of this.

7 Q Thank you, Judge. That wasn't my question.
 8 My question was, have you taken the time to look at
 9 the reports of businesses that generate the type of
 10 materials that are located here in your home county,
 11 Montgomery County, that are proposed to be disposed of
 12 at TexCom?

13 A Are you saying have I reviewed those papers
 14 there?

15 Q No. I'm asking if you've reviewed any papers
 16 regarding who generates Class I non-hazardous
 17 industrial wastewater in Montgomery County.

18 A I reviewed a list of certain businesses with
 19 the county attorney's office at one time. I don't
 20 recall the exact number I looked at. I have looked at
 21 some of that, yes.

22 Q The counties that you've proposed as better
 23 counties for waste disposal, how do you think the
 24 County Judge in those counties would feel about
 25 out-of-county waste? Do you think they would have

1 similar feelings?

2 MR. WALKER: Objection, Your Honor.
 3 That causes him to speculate about the opinion of a
 4 person not in this case.

5 JUDGE EGAN: Sustained. Can you
 6 rephrase your question?

7 MR. RILEY: Certainly.

8 Q (By Mr. Riley) You go through a number of
 9 counties in your prefiled testimony -- it seems to be
 10 largely based on population -- where you think it
 11 would be better to site such a facility. Correct?

12 A That's correct. And I'll be glad to tell you
 13 why.

14 Q Maybe Mr. Walker will ask you why. I could
 15 guess why, but I'm asking you if that's correct.

16 A Yes.

17 Q And you believe -- this is where I ask why.
 18 You believe that the counties that are less populated,
 19 that perhaps don't generate the type of material that
 20 needs to be disposed of, would be better suited to
 21 such an operation. Is that a fair statement?

22 A It's not really based on population. Do you
 23 want me to answer the question in detail now or later?

24 Q No, please; go ahead.

25 A It's not really based on population. The

1 subject proposed injection well is located in the old
 2 Conroe oil field where there were hundreds, maybe
 3 thousands, of wells drilled, improperly capped or not
 4 capped.

5 The so-called impervious layers are not
 6 impervious layers. In other counties, there is not a
 7 Conroe oil field. The hypothesis of being an area
 8 that could take this water without hundreds of holes
 9 punched, if not thousands -- I don't know how many
 10 wells were out there -- are probably not likely in
 11 some of the counties that I mentioned in this
 12 testimony. That's the difference.

13 Q Judge, I was going to refrain from asking you
 14 technical questions but -- and you said earlier that
 15 you're really not the person to ask technical
 16 questions to, but you're making technical assumptions,
 17 are you not?

18 A Not really technical. This is common-sense
 19 assumptions. You don't need to be a geologist to
 20 answer the question.

21 Q You don't have to be a geologist to
 22 understand the stratum below Conroe. Is that your --

23 A That's correct, although I did have a geology
 24 class at the University of Texas.

25 Q I never took geology. I took a lot of

1 courses, chemistry courses, science courses, things of
 2 that nature. And I do recall that -- from those
 3 courses that science is best left to the scientists.
 4 Would you agree?

5 A Not necessarily.

6 Q So you think you're in a better position to
 7 evaluate the geology beneath the TexCom site than some
 8 of the experts that have been hired in this case, even
 9 by the county or the city?

10 A I'm not saying that at all.

11 Q Well, then, I'm asking you because, again,
 12 with your preamble that you're not a technical expert,
 13 your statement about an old oil field and penetrations
 14 and permeabilities, I'm just wondering whether you
 15 have a technical basis for that answer.

16 A You can call it a technical basis or a
 17 common-sense basis. These Judges up here understand
 18 exactly what I have said. They understand what I'm
 19 talking about. They're not geologists. So the
 20 question -- my answer stands.

21 Q All right. You're not a geologist, sir?

22 A No, I'm not.

23 Q You're not a hydrologist?

24 A No.

25 Q Hydrogeologist?

<p style="text-align: right;">Page 839</p> <p>1 A Yes -- no.</p> <p>2 Q You think this decision should be made on</p> <p>3 common sense. Is that correct?</p> <p>4 A Partially.</p> <p>5 Q There should be no science considerations?</p> <p>6 A I've never said that.</p> <p>7 Q I'm asking you, should we just stop now?</p> <p>8 Should we just stop now based on your common-sense</p> <p>9 understanding of the Conroe field?</p> <p>10 AUDIENCE MEMBERS: Yes.</p> <p>11 JUDGE EGAN: The audience needs to be</p> <p>12 quiet, please.</p> <p>13 A I'm sure there have been quite a few more</p> <p>14 witnesses regarding this, besides me. I would think</p> <p>15 the Judges would look at all the testimony, meaning</p> <p>16 the scientific testimony as well as other testimony.</p> <p>17 I think the things I've said regarding</p> <p>18 the number of holes punched in that oil field, the</p> <p>19 testimony that probably will come from people like</p> <p>20 Eddie Stephan out here, who have stated to me</p> <p>21 personally they did not plug those wells. You don't</p> <p>22 need to be a geologist to answer these questions.</p> <p>23 These are facts. They can be testified against as</p> <p>24 facts for these Judges to hear this case.</p> <p>25 Q (By Mr. Riley) Okay. So the Judges should</p>	<p style="text-align: right;">Page 841</p> <p>1 A There may be an oil well or two, nothing</p> <p>2 like -- not anything compared to what we have here in</p> <p>3 Montgomery County.</p> <p>4 Q Judge, I know you couldn't be here --</p> <p>5 probably because of your schedule -- for the entire</p> <p>6 case, but is there injection into the area around the</p> <p>7 Conroe field occurring today?</p> <p>8 A I've heard there is.</p> <p>9 Q Waste disposal injection specifically?</p> <p>10 A It's my understanding there is.</p> <p>11 Q Do you understand that a company by the name</p> <p>12 of Wapiti is currently the unit operator for the</p> <p>13 Conroe field?</p> <p>14 A I'm not familiar with that company.</p> <p>15 Q Do you know historically who has been the</p> <p>16 unit operator of the Conroe field?</p> <p>17 A I do not.</p> <p>18 Q Does Exxon ring a bell?</p> <p>19 A I've heard of Exxon.</p> <p>20 Q Do you know if they've ever operated the unit</p> <p>21 that's considered the Conroe field?</p> <p>22 A They drilled the wells.</p> <p>23 Q Do you know of the -- what a Class II</p> <p>24 disposal well is?</p> <p>25 A I would be hard-pressed to give you a</p>
<p style="text-align: right;">Page 840</p> <p>1 certainly make the decisions on the facts and the</p> <p>2 science, not on common sense?</p> <p>3 A All the above. All the above.</p> <p>4 Q Is there no oil production in Crockett</p> <p>5 County?</p> <p>6 A I'm not familiar with Crockett County's oil</p> <p>7 production.</p> <p>8 Q Are you familiar with production in Pecos</p> <p>9 County?</p> <p>10 A No, sir.</p> <p>11 Q Ozona?</p> <p>12 A No.</p> <p>13 Q Any of the counties you mentioned in your</p> <p>14 prefiled testimony?</p> <p>15 A They don't have a history, to my knowledge,</p> <p>16 of a prolific oil field like we've had here in</p> <p>17 Montgomery County in the last 50 years.</p> <p>18 Q I guess my question is -- back to your answer</p> <p>19 about you didn't make the decision or the</p> <p>20 recommendation to locate the facility in one of those</p> <p>21 counties based solely on population, you correlated</p> <p>22 that with your statements about the Conroe field. And</p> <p>23 what I'm trying to understand is whether you have any</p> <p>24 basis for saying that there isn't oil and gas</p> <p>25 exploration in those counties.</p>	<p style="text-align: right;">Page 842</p> <p>1 definition.</p> <p>2 Q Well, if I were to tell you that a Class II</p> <p>3 disposal well is a well -- an injection disposal well</p> <p>4 that injects potentially hazardous waste resulting</p> <p>5 from oil and gas exploration and production and that</p> <p>6 there are some 54 of those operated by Wapiti this</p> <p>7 very day injecting approximately 120,000 gallons per</p> <p>8 day, would that surprise you?</p> <p>9 A That may be the reason we have problems in</p> <p>10 this county. I don't want one more, that's for sure.</p> <p>11 Q I understand that, but 120,000 gallons is</p> <p>12 more than ten times even the maximum proposal by</p> <p>13 TexCom. And, again, I know you weren't here for the</p> <p>14 portion of testimony that said disposal is occurring</p> <p>15 in the USDW or underground source of drinking water.</p> <p>16 Do you understand that?</p> <p>17 A Yes.</p> <p>18 Q That the TexCom proposal actually proposes to</p> <p>19 inject thousands of feet lower than the underground</p> <p>20 source of drinking water, do you understand that also?</p> <p>21 A Yes.</p> <p>22 Q And I ask you, I guess as County Judge, do</p> <p>23 you intend to take any action in regard to Wapiti's</p> <p>24 injection of Class II wastes?</p> <p>25 A I wasn't aware there were that many; maybe we</p>

1 ought to. Maybe we ought to look at that.

2 Q Judge, I'm not trying to fence with you, but
3 I would like to understand your suggestion as to a
4 proper method of disposal for Class I non-hazardous
5 industrial waste generated in Montgomery County.

6 What do you think -- how do you think
7 that waste should be handled, and where do you think
8 it should be disposed?

9 A I'm probably not qualified to give you an
10 answer of the options of how to dispose of hazardous
11 waste.

12 Q I didn't say hazardous. I said Class I
13 non-hazardous waste.

14 A The answer goes for the same question.

15 Q It's your understanding, is it not, that this
16 well -- the wells, I should say, that TexCom proposes
17 to construct and operate would not accept hazardous
18 waste? Do you understand that?

19 A That's my understanding.

20 Q So the materials that it would accept are
21 wastewaters that are non-hazardous?

22 A Yes.

23 Q All right. Do you know of -- I suspect you
24 have some dealings in your role as County Judge in
25 addressing wastewater treatment plant issues. Do you

1 have any experience or knowledge of wastewater
2 treatment plant operations?

3 A That's dealt with mostly by municipal utility
4 districts.

5 Q And municipalities, I assume, like the city
6 of Conroe?

7 A That's correct.

8 Q Do you know if the city of Conroe's
9 wastewater treatment plant accepts Class I
10 non-hazardous industrial wastewater?

11 A I'm not familiar with what the city of Conroe
12 accepts.

13 Q Would it surprise you to know that they do?

14 A Yes.

15 Q Would it surprise you to know that they treat
16 that waste and then discharge it into the surface
17 drinking water sources?

18 A Yes.

19 Q Would it surprise you to know that some of
20 the same drinking water sources that you're
21 negotiating as a future drinking water source for your
22 county also receives waters from wastewater treatment
23 plants accepting the type of waste that TexCom
24 proposes to inject into the ground in this case?

25 A I think what you're trying to --

1 Q I'm asking if you know, sir. I think you're
2 trying to interpret my question, but if you're going
3 to give me an answer, other than the answer to my
4 question --

5 A The answer to your question is this: This is
6 one type of water you're trying to talk about.

7 Q Yes, sir.

8 A These wells will take this kind of water that
9 you're describing, plus others.

10 Q No, sir. Class I non-hazardous industrial
11 wastewater.

12 A Are you saying the only water that we inject
13 into this well is only from treated water -- sewer
14 treatment plants?

15 Q No. We're missing each other. I apologize.
16 The type of waste we're talking about is Class I
17 non-hazardous industrial wastewater -- all right --
18 from a variety of sources, but that's the
19 classification we're talking about.

20 A Yes.

21 Q I asked you -- and I apologize if I've been
22 confusing, but I asked if you knew that the Conroe
23 wastewater treatment plant accepts those wastes today.

24 A I don't know what the city of Conroe accepts,
25 but I think what you're trying to do is to put into

1 the impression of these Judges and me and the public
2 that treated water from a treatment plant is the kind
3 of water going into this well, and that may be one
4 type of water going through to this well, plus many
5 others.

6 Q Yes, sir, but that's not what I'm trying to
7 convey. Unfortunately you weren't here for the
8 discussion earlier to understand the context. I
9 apologize if that's unfair, but I think the Judges --
10 these Judges over here do understand that one of the
11 issues in this case is alternate methods of disposal.

12 So I'm asking if you know alternate
13 methods of disposal for the types of waters that
14 TexCom proposes to handle and dispose of at its
15 facility.

16 A I do not know alternate methods of disposal.

17 Q And I carried on from there as to whether you
18 knew that the city of Conroe accepts those types of
19 wastewaters into its wastewater treatment plant.

20 A You've said they do.

21 Q I'm asking you if you know.

22 A I don't know.

23 Q I think I asked you then if it would surprise
24 you to learn that they do.

25 A It would.

<p style="text-align: right;">Page 847</p> <p>1 Q Then my next question, which is, I think, 2 where we got off track, is whether it would surprise 3 you to learn that the discharge -- the back end, the 4 tail end, the tail pipe of the wastewater treatment 5 plant, is to surface drinking water sources. 6 JUDGE EGAN: I don't understand your 7 question. You might want to repeat it. 8 MR. RILEY: I'm sorry. 9 Q (By Mr. Riley) Do you understand where the 10 city of Conroe discharges after treating the 11 wastewater from its facility? 12 A The San Jacinto River. 13 Q Is that the source of drinking water that you 14 talked about earlier that you're discussing to meet 15 the needs of Montgomery County? 16 A Not really. We're upstream. 17 Q So you're -- that's Houston's problem? 18 A Evidently. 19 Q Thank you, Judge. I appreciate your time 20 this afternoon. 21 A Thank you. 22 Q I hope I wasn't disrespectful. 23 JUDGE WALSTON: Any questions, Ms. Goss? 24 Mr. Williams? 25 MR. WILLIAMS: Yes.</p>	<p style="text-align: right;">Page 849</p> <p>1 Q Are you aware that in the late 1980s, early 2 1990s, the federal government passed what's called 3 Subtitle D to the Resource Conservation Recovery Act? 4 A No. 5 Q I'll leave it at that then. 6 MR. WILLIAMS: Those are all the 7 questions I have, Your Honor. 8 JUDGE EGAN: Okay. Any redirect? 9 MR. WALKER: No redirect, Your Honor. 10 JUDGE EGAN: Thank you very much, Judge 11 Sadler. 12 (Applause) 13 MR. WALKER: Your Honor, except for 14 Hughbert Collier, that concludes the aligned 15 protestants' witnesses. 16 JUDGE EGAN: We'll reconvene Monday 17 morning at 9 in Austin, and begin, I believe, with 18 Collier and Grant. Is that correct? 19 MR. WALKER: That's correct, Judge. 20 JUDGE EGAN: Then we look forward to 21 seeing you, and we are adjourned for today. 22 (Proceedings recessed at 4:21 p.m.) 23 24 25</p>
<p style="text-align: right;">Page 848</p> <p>1 CROSS-EXAMINATION 2 BY MR. WILLIAMS: 3 Q Judge Sadler, my name is John Williams. I'm 4 representing the Executive Director. Mr. Riley 5 mentioned the Security landfill east of town and the 6 Montgomery Landfill Solutions proposed landfill north 7 of it. Is that correct? 8 A Those were mentioned, yes, sir. 9 Q Yes. And you mentioned that Montgomery 10 County has taken a position opposed to the Montgomery 11 Landfill Solutions landfill. Correct? 12 A The Commissioners' Court has passed a 13 resolution in opposition. 14 Q Were you aware that Waste Management recently 15 applied for and was given an amended permit to expand 16 its Security landfill? 17 A I'm aware of that. 18 Q Did the county take any position on that 19 amendment? 20 A I think it was probably a good move. I think 21 it extended that landfill for years to come, and we 22 do, in fact, need a landfill in Montgomery County. 23 Q Do you know how old that landfill is? 24 A I believe that landfill, Security, was 25 established in the mid '80s.</p>	

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